

Aspen Aerogels, Inc. NYSE:ASPN

FQ3 2024 Earnings Call Transcripts

Thursday, November 07, 2024 1:30 PM GMT

S&P Global Market Intelligence Estimates

	-FQ3 2024-			-FQ4 2024-	-FY 2024-		-FY 2025-	
	CONSENSUS	ACTUAL	SURPRISE	CONSENSUS	CONSENSUS	GUIDANCE	CONSENSUS	GUIDANCE
EPS Normalized	(0.08)	0.19	NM	0.03	0.21	-	0.62	-
Revenue (mm)	117.01	117.34	▲0.28	94.26	418.11	450.00	521.03	720.00

Currency: USD
Consensus as of Nov-07-2024 12:12 AM GMT

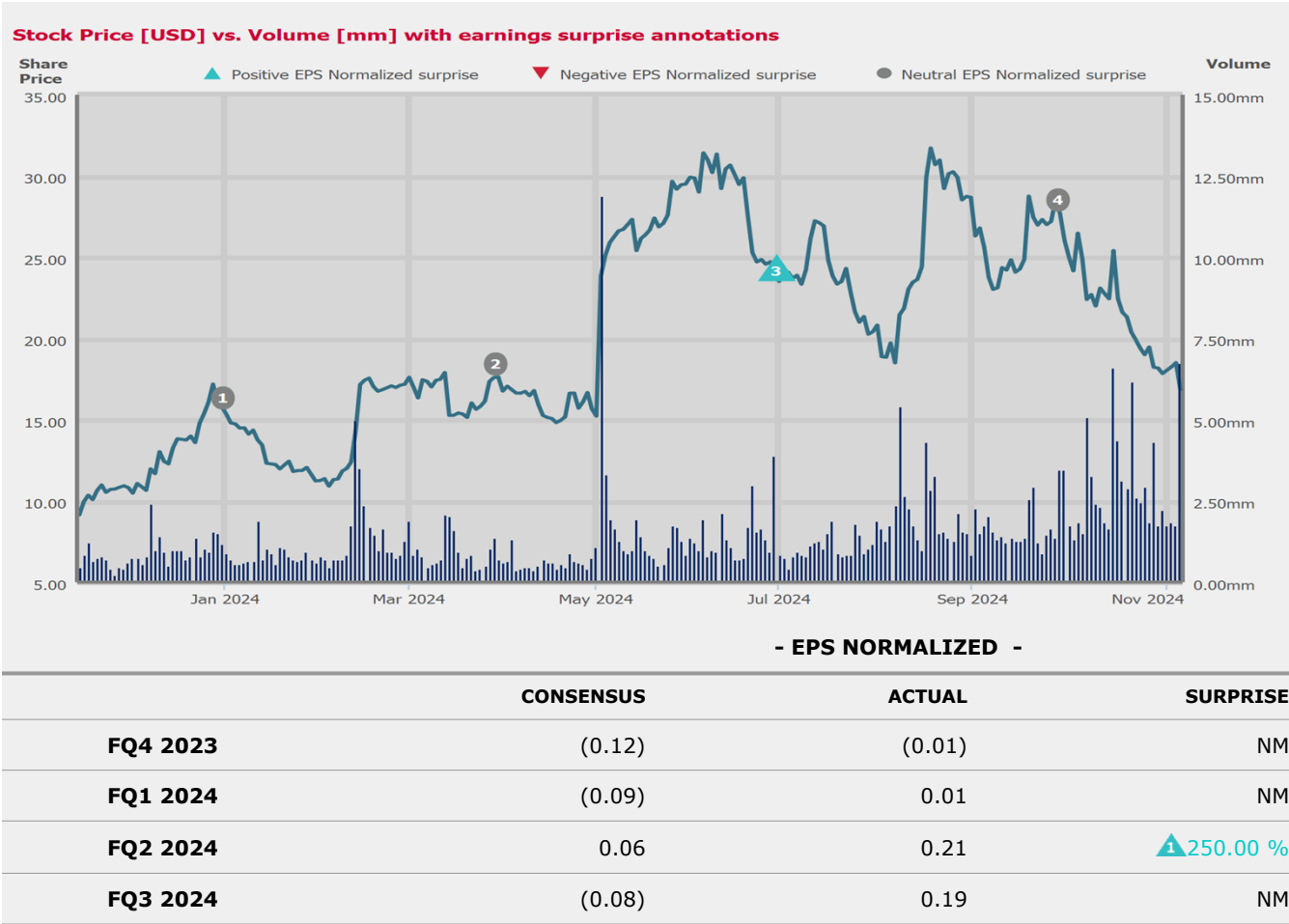


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Call Participants

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Presentation

Operator

Good morning. Thank you for attending the Aspen Aerogels, Inc. Q3 2024 Financial Results Call. [Operator Instructions] I would now like to turn the conference over to your host, Neal Baranosky, Aspen's Senior Director, Head of Investor Relations and Corporate Strategy. Thank you. You may proceed, Mr. Baranosky.

Neal Baranosky

Senior Director of Corporate of Strategy & Finance

Thank you, Ezra. Good morning, and thank you for joining us for Aspen Aerogels Third Quarter 2024 Financial Results Conference Call. With us today are Don Young, President and CEO; and Ricardo Rodriguez, Chief Financial Officer and Treasurer. The press release announcing Aspen's financial results and business developments and the slide deck that will accompany our conversation today are available on the Investors section of Aspen's website, www.aerogel.com.

During this call, we will refer to non-GAAP financial measures, including adjusted EBITDA. The reconciliations between GAAP and non-GAAP measures are included in the back of the slide presentation and earnings release. On today's call, management will make forward-looking statements about our expectations. These statements are subject to risks and uncertainties that could cause our actual results to differ materially. These risks and uncertainties include the factors identified in our filings with the SEC. Please review the disclaimer statement on Page 1 of the slide deck as the content of our call will be governed by this language.

On November 19, Ricardo and I will be hosting an investor discussions in New York at the Craig-Hallum Alpha Select Conference and the Bernstein Annual Industrials Forum. Also, on November 19, we will be attending an investor dinner in Menlo Park for the Piper Sandler 2024, Bay Area EV and Batteries Bus Tour. On November 20, Ricardo and I will host investor meetings at Barclays Annual Global Automotive and Mobility Tech Conference. This event will also include a fireside chat with Ricardo from 1:00 to 1:35 p.m. EST. On December 4 and 5, our team will be presenting at the Deploy24 Conference in D.C. hosted by the Department of Energy. And finally, on December 5, Ricardo and I will be hosting investor discussions at the Janney Clean Energy Investment Symposium in New Orleans.

I'll now turn the call over to Don. Don?

Donald R. Young

President, CEO & Director

Thanks, Neal. Good morning, everyone. Thank you for joining us for our Q3 2024 earnings call. My comments will focus on Q3 and year-to-date performance, our revised 2024 full year outlook and the status and expected impact of several key elements of our strategy. Ricardo will dig deeper into our financial performance, 2024 outlook and recent financing activities. We will conclude with a Q&A session.

We operated well in Q3. The strong execution leveraged and extended the momentum that we built throughout 2023 and during the first half of this year. The performance is reflected in the Q3 financial results and in a higher 2024 revenue and adjusted EBITDA outlook, our third beat-and-raise quarter of the year. Our year-to-date numbers and our Q4 momentum are the basis for raising our 2024 outlook to \$450 million of revenue and \$90 million of adjusted EBITDA. Since we first issued our 2024 outlook, we have increased guidance on revenue by \$100 million and on adjusted EBITDA by \$60 million, reflecting the good work of the Aspen team.

Our quarterly revenue mix was comprised of \$91 million of PyroThin Thermal Barriers and a modest \$27 million for Energy Industrial. With respect to Energy Industrial, this year has been dedicated to the transition to our supplemental supplier in support of the business. Our external manufacturing facility serving our energy industrial business performed a successful 5-week planned turnaround during Q3 aimed at upgrading equipment to be more flexible and efficient and importantly, to expand capacity.

While the long duration of the turnaround dampen Q3 results for Energy Industrial, it positions our Energy Industrial team for a solid fourth quarter, and we believe, for a record 2025.

Energy Industrial activity remained strong across all regions and segments, including significant growth of Cryogel products serving the LNG industry. We believe our Energy Industrial team will drive profitable growth with a medium-term goal of doubling the size of the business to provide a valuable baseload of revenue and profit for the company.

Our revenue for our PyroThin Thermal Barrier business was driven by continued EV growth at GM. As we navigate this phase of EV adoption, we are benefiting greatly from a strong collaboration with GM, both commercial and technical. We were energized by GM's Investor Day and its Q3 earnings call where they expressed their full-throated commitment to electrification, including the launching of a full lineup of profitable EVs.

In addition to GM and our previously announced 5 other OEM awards, we are pleased to announce a new OEM award to supply PyroThin Thermal Barriers to Mercedes-Benz for its battery electric platform based on prismatic cells with production expected to begin in 2027.

This additional OEM award is through ACC, a battery cell joint venture between Stellantis, Saft, TotalEnergies and Mercedes-Benz. Earlier awards from ACC were for Stellantis' STLA medium platforms, which we expect to begin to ramp in late 2025. The continued adoption of PyroThin Thermal Barriers is a testament to the strength and uniqueness of our portfolio. We are confident in our ability to serve this ever-evolving market with our innovative and agile technology platform. Our focus is on securing our 8th OEM design award, which would further diversify our customer base and support our long-term growth through the decade.

While it's challenging to pinpoint the exact timing of nominations, even in cases, we've agreed upon technical and commercial terms, we believe this next OEM program award is on the near-term horizon. We will keep you informed about the progress.

As we build our Energy Industrial and PyroThin Thermal Barrier businesses, we are focused not only on growth, but on profitable growth. From 2021 to 2023, we nearly doubled revenue while driving gross profit margin from 8% to 24%. We are ahead of schedule for doubling revenue again from 2023 to 2025 with an expected revenue growth rate in 2024 alone approaching 90%. And again, with profitability in mind, our gross profit margin through 3 quarters this year has expanded to over 40%.

With our revised outlook, we anticipate growing revenue in 2024 by \$211 million and adjusted EBITDA by \$113 million or 54% of incremental revenue. Our commercial and operating progress since 2021 demonstrates the financial power of leveraging scale and driving margins.

Importantly, we anticipate additional profitable growth in 2025 and to continue a direct path to fully utilizing our current capacity and supply arrangements of at least \$650 million of revenue capacity with at least 35% gross profit margins and 25% adjusted EBITDA margins. We believe our financial performance during the first 3 quarters of 2024 more than supports these profitability metrics.

As a reminder, we are executing 3 key elements of our strategy that are in support of these revenue and profitability targets. First, the full conversion of the East Providence aerogel manufacturing plant to support the growth of the PyroThin Thermal Barrier business. Second, the transition to our external manufacturing facility to support the growth of the Energy Industrial business. And third, the financial stewardship to reinforce the strength and flexibility of the company necessary to achieve our interim and long-term goals and to take advantage of opportunities as they present themselves.

In terms of financial strength and flexibility, during Q3, we generated \$21 million in operating cash flow and finished the quarter with over \$113 million in cash. In addition, we put in place a \$100 million working capital revolver. Since Q3, we took the next major step towards efficiently financing our plant -- Statesboro aerogel manufacturing plant by receiving the conditional commitment from the DoE LPO for a loan of up to \$670 million. While we do not have assurance that the DoE will close the loan, we believe the remaining conditions for closing the loan are controllable.

The Statesboro aerogel manufacturing plant is expected to have revenue capacity at between \$1.2 billion and \$1.6 billion and is designed to generate not only accretive margins, but also positive cash flow at moderate capacity utilization levels. Also in October, we raised over \$90 million in an equity offering to strengthen our balance sheet. Our overall financial strength and profitable operating performance provide us with the resources and flexibility to execute our strategy and to drive long-term profitable growth.

As a reminder, our strategy is to leverage our aerogel technology platform into large dynamic markets, especially those with sustainability themes. In work unrelated to the Loan Programs Office, the U.S. Department of Energy awarded Aspen Aerogels with a \$7.3 million R&D grant dedicated to advancing our aerogel technology platform in the field of battery materials. Our R&D teams have advanced the development of our carbon aerogels in various battery chemistries and this DoE R&D grant, sponsors our team of scientists to further develop a proprietary carbon aerogel to enhance the performance of fast-charging high-power LFP cathode materials. As part of this R&D grant, Aspen is partnering with the Oak Ridge National Laboratory to leverage its deep LFP battery expertise and to both advance and validate the technology.

The DoE grant and the Oak Ridge partnership provide to us the resources and complementary expertise to demonstrate the fast-charging LFP technology and to expand the scale from lab to pilot. If successful, Aspen's LFP cathode material may offer a domestically sourced high-performance and cost-effective solution to fast-charging LFP batteries. We will keep you informed about the progress.

Ricardo, over to you.

Ricardo C. Rodriguez
CFO & Treasurer

Thank you, Don, and good morning, everyone. I'm happy to report another productive quarter on behalf of our team, starting on Slide 4. We delivered \$117.3 million of revenue in Q3, which translates into 93% growth year-over-year. This reflects an annual revenue run rate of approximately \$470 million. Sustaining a comparable level quarter-over-quarter is great, but this could have been even higher. Our Energy Industrial segment revenue was \$26.8 million, a decrease of 4% year-over-year and a 27% decrease quarter-over-quarter. At this point, most of the segment's product was supplied by our external manufacturing facility.

As Don mentioned in his remarks, we went through a 5-week operational improvement turnaround at this facility to enable a higher throughput rate in Q4 and into 2025. We remain sold out in this segment, and there's no doubt that without the operational improvement shutdown, our revenues here could have been at least \$10 million higher for the quarter. EV Thermal Barrier revenue of \$90.6 million was up over 176% year-over-year and 12% quarter-over-quarter, reflecting a high level of demand from our main customers in this segment.

In Q3, company-level gross profit margins were 42% and our gross profit of \$49 million, is a \$35.2 million improvement over gross profit of \$13.8 million during the same quarter last year. Our Energy Industrial segment delivered \$10.8 million of gross profit or an 84% year-over-year increase on comparable revenues. In EV Thermal Barriers, we delivered \$38.3 million of gross profit in Q3. The resulting gross profit margins during the quarter were 40% and 42% for our Energy Industrial and EV Thermal Barrier segment, respectively.

Without any material onetime charges in Q3. It was encouraging to see our gross margins increase by 90 basis points over our overall gross margin of 41% during the first half of the year, which is a more direct comparison versus splitting out Q1 and Q2 due to various onetime charges that hurt the P&L in the first quarter but benefited in the second quarter as these were reimbursed.

Operating expenses, which are sized for our near-term projected annual revenue capacity of over \$650 million were \$31.6 million in Q3 or flat quarter-over-quarter. These would have been lower without several onetime expenses linked to performance pay. With our OpEx flat or down here over the last 3 quarters, I'll reemphasize that any increases will be aimed at driving incremental demand and profitability only. Putting

these elements together, our adjusted EBITDA was \$25.4 million in Q3 compared to negative \$7.3 million during the same period last year.

Echoing Don's remarks, 22% adjusted EBITDA margins put us ahead of any expectations that we had as we were gearing the company's cost structure 2 years ago. Our team continues validating that we've set up the business to be profitable without having to rely on outsized revenue growth.

As a reminder, we define adjusted EBITDA as net income or loss before interest, taxes, depreciation, amortization, stock-based compensation expenses and other items that we do not believe are indicative of our core operating performance.

In Q3, these adjustments were limited to \$2.6 million of stock-based compensation, \$5.3 million of depreciation, \$1.2 million of interest income and \$31.3 million of interest and financing-related expenses, which included the loss on extinguishment of debt of \$27.5 million related to the redemption of the company's convertible note with Koch Industries. Our net loss in Q3 was \$13 million or negative \$0.17 per diluted share versus a net loss of \$13.1 million or negative \$0.19 per diluted share in the same quarter of 2023. Without the loss on extinguishment of debt related to the convertible note, we would have had \$14.5 million of net income.

Next, I'll turn over to cash flow and our balance sheet. Cash generated by our operations of \$20.8 million reflected our adjusted EBITDA of \$25.4 million and \$3.5 million used for working capital. Interest expenses of \$0.8 million and income tax expenses of \$0.3 million. Quarter-over-quarter, our working capital increases were reduced by 85%, confirming that what we've been saying all along about our team's ability to preserve cash if we don't have much quarter-over-quarter revenue growth. Our capital expenditures during the quarter were \$20.8 million, which was fully funded by the cash generated from our operations. So the core business did not consume any cash during the quarter.

In Q3, we spent \$16.1 million towards slowly advancing progress of Plant 2. To date, we have incurred \$316.3 million in cumulative capital expenses towards Plant 2 in Georgia to position the project for a potential restart of construction after we've closed the loan from the U.S. Department of Energy's Loan Programs Office targeted in Q1 of next year. I'll go into more details around our Statesboro Plant in a minute.

Our net financing activities in the quarter of \$22.2 million included all the ins and outs of the company's redemption of the legacy convertible note for \$150 million, the establishment of a \$125 million term loan facility and the drawdown of \$43 million within a \$100 million asset-based revolving credit facility with mid-cap financial. We ended the quarter with \$113.5 million of cash and shareholders' equity of \$507.6 million. More recently, on October 21, we closed an underwritten public offering with net proceeds of \$93.2 million and as of October 31, our cash balance was of \$203 million. Our Statesboro Plant will be fully funded after we close on the DoE loan. We are jointly targeting Q1 of next year to finalize that and could not be more excited about focusing our energies on playing offense and defining incremental elements of our strategy that go beyond Plant 2 in 2025.

Now I'll turn over to Slide 5. And walk you through our updated thoughts on the outlook for the rest of the year. With only 1 quarter left and recent communications from General Motors confirming their plans to produce 200,000 EVs for their own brands in 2024, we are leading our Ultium-based production expectations unchanged to 225,000 vehicles, including approximately 45,000 units of the Honda Prologue and the Acura ZDX. This leaves 180,000 units for GM and its brands. While the recent annualized sales rate in the U.S. at around 200,000 units for Ultium vehicles over the last 3 months is very encouraging, IHS estimates that General Motors has produced about 137,000 vehicles for its brands through the end of Q3. So ramping up to produce over 60,000 units in Q3 as possible but we feel more confident around our prior estimate of 180,000 vehicles wholesale by GM in 2024.

When thinking about the revenues of our EV Thermal Barrier segment, and our guidance update, it's worth highlighting a couple of important things. The first is that as we've been reminding everyone over the last several quarters, it may take several weeks or months for our parts to make their way into a battery pack or a vehicle and even more time into a sold vehicle. Trying to tie vehicle production or sales to our revenues is a high-level directional and varying precise exercise.

The second is that during the launch phase of battery module, pack and vehicle assembly, OEMs have been procuring a higher number of parts to produce a vehicle than expected. As initial production yields at the OEMs improve, any demand risk is more than counterbalanced with incremental vehicle throughput over time, and we are not concerned about this reducing demand in the future.

The third is that contracts can give us the right to invoice an OEM for several weeks of forward-looking demand if we have produced those parts. This notion of billing and holding in combination with weekly delivery schedules for 6- to 9-month rolling periods, enable smoother planning across the value chain and reduce potential volume fluctuations for suppliers.

And the last one is that we generally have visibility into the OEM's inventory of our parts, and they focus on maintaining a low level of working capital throughout the value chain. So the idea of an OEM suddenly not ordering, because they have excess inventory, is not only something that can be foreseen, but it's highly unlikely when a range of vehicle nameplates is being launched.

With all that in mind, we now expect our EV Thermal Barrier segment to deliver \$315 million of revenues in 2024. This is a 31% or \$75 million increase over our prior outlook of \$240 million, mainly driven by the second and third points that I just made, along with increasing power prototype volumes for new customers.

Switching gears to our Energy Industrial segment, which without an external manufacturing facility would have been supply constrained to less than \$10 million of product per quarter at this point. We now expect to be able to supply \$135 million of product in 2024 or at least \$42 million in Q4. The operational turnaround in Q3 and the validation of the resulting capacity improvements from it forced us to push out \$15 million of supply into 2025, but now enable that facility to deliver over 20% more output per unit of time depending on product mix as we position that business for next year.

Turning over to Slide 6 and putting our outlook together. We now expect to deliver \$450 million of revenue in 2024. This level would enable \$9 million of net income versus our prior outlook of over \$7 million. The encouraging thing is that we are making this outlook update after having incurred \$27.5 million towards redeeming the prior convertible note. So we excluded that to assess the net income generated by the underlying business improvement over our prior outlook would be of \$29.5 million on an incremental \$60 million of revenue.

Our updated EBITDA outlook of \$90 million is a 50% improvement over our prior outlook of over \$60 million while continuing to consider some potential headwinds to our near-term profitability, such as the potential cost of new launches, higher power prototype sales, engineering changes that could lead to inventory obsolescence and expedited freight cost driven by the start-stop nature of some nameplates in our thermal barrier demand.

On the flip side, if additional demand is truly there, we expect a disproportionate amount of it to continue not just flowing to our bottom line, but now to our cash balance. Our diluted EPS outlook is improving by \$0.02 per share to \$0.11 per share over \$0.09 per share on a post offering share count of 84 million shares. Again, this update would be significantly higher without the loss on extinguishment of debt tied to the redemption of the convertible note.

Our CapEx without including Plant 2 is expected to be reduced by \$5 million to \$40 million from \$45 million for the year, thanks to our team's ability to deliver a higher level of upside from our EV Thermal Barrier equipment in Mexico. We continue believing that this investment is enough for us to ramp up our production capacity in 2025. We spent \$36 million year-to-date towards advancing the construction of Plant 2 in Statesboro, Georgia.

Looking ahead, we are not planning to spend more than \$20 million advancing the construction of Plant 2 until we close the loan pursuant to the DoE's advanced technology vehicle manufacturing or ATVM program targeted in Q1 of 2025. This investment will ensure that the site is advanced enough to preserve all our investments made to date, and it enables the potential reacceleration of construction next year. On the right side of Slide 6, before moving on, I'll let you take stock of the journey that our team has been on for the past 5 quarters.

This quarter, we're particularly proud of being free cash flow neutral on what should have been a quarter with higher and accretive Energy Industrial revenues. The team deserves a lot of credit for staying on top of working capital and we look forward to managing our investments outside of Plant 2 in a way that makes generating positive free cash flow a habit.

Next, let's turn over to Slide 6. With the recent announcement of the conditional commitment for a direct loan of up to \$670.6 million from the Department of Energy's loan programs office towards our plant in Georgia, we wanted to provide you with a quick update on the project and some key parameters that our team is ensuring as we prepare to restart construction after we close on the loan in the first quarter of 2025. The scope of the project has evolved through the right timing of the last 2 years in a way that gives us very strong conviction to make it a critical part of the current leg of our strategy aimed at driving the uninterrupted profitable growth of our EV Thermal Barrier segment.

Let's start with the costs. The last estimate that we had disclosed around the cost of the plant was so \$710 million in Q1 of 2023. Adjusting this for the cost of right timing the project, inflation and scope that includes our latest process improvements. As we requote the project today, we expect it to cost anywhere from \$800 million to \$960 million. The DoE loan is designed to fully fund our remaining spend on the project. The structure of project financing with treasury rates and Georgia as the borrower, we see the loan as a critical enabler for the project. It's worth understanding how advanced Plant 2 processes are and the underlying product economics that these enable.

By combining 2 critical stages of our aerogel manufacturing process into 1 set of equipment and 1 step with an unrestricted footprint that enables linear product flow without overhead transfers, we expect Plant 2 to enable fixed costs that are at least 25% lower than those of comparable aerogel production facilities. This means that even though the 2 main clusters of equipment that we're installing there, enable \$1.2 billion to \$1.6 billion of capacity. The facility only needs to be producing \$200 million of revenues within our EV Thermal Barriers segment to be accretive to our 42% gross margins of this most recent quarter, while generating enough cash to service the debt of the project.

In summary, our EV Thermal Barrier segment with our plant in Rhode Island that currently has an annual EV Thermal Barrier revenue capacity of approximately \$500 million and just a sliver of the capacity of Plant 2 can continue growing profitably without skipping a beat and service the debt. If we wanted to stress test the breakeven point of Plant 2 stand-alone, we estimate that it only needs \$250 million of demand to deliver our current gross margins. Moreover, only \$400 million of annual demand or just a bit more than 10% and of our Q3 EV Thermal Barrier segment run rate would be required to service the debt over the tenure of the loan.

Turning over to Slide 7. If we know that we only need an incremental \$200 million of demand over the \$500 million of Plant 1 in Rhode Island can supply to make Plant 2 more than viable and accretive to the current margins of our EV Thermal Barrier segment, then let's look at our latest revenue pipeline from 2026 to 2029. This is an update over a similar slide that we showed in February of this year during our 2023 full year results earnings call. It reflects a small decrease in total demand, driven by some of the ebbs and flows of vehicle programs and the launch delays within the OEMs, some of which you may have read in the press over the past few months.

Like last time, the bars on this slide represent the estimated value of our currently awarded and quoted business, which assumes our customers' internal volume projections times the price that we've quoted for each part. The red line that we have now added represents what our EV Thermal Barrier segment's revenues would be if we discount this pipeline by 60% in each year. One can see here that we will arguably need the plant in 2026 and that we not only would need in 2027, but that the revenue level driven by a 60% discount from our pipeline is above the point in which our EV Thermal Barrier business can operate both plants without impacting our current gross margins. For 2029, although we continue working to secure additional demand through OEM awards that go well beyond then, we need to discount the estimated demand by 43% and to not run out of the capacity from both plants in 5 years from now.

In summary, we continue estimating that there are multiples of excess demand between our customers' estimates of their demand our latest capacity plan assessment and what is required to make Plant 2 accretive to our current margins. We believe that this leaves room for plenty of program delays, lower

volume ramps, long sourcing processes, and multi-stakeholder decisions that are customary in the automotive industry without affecting our ability to grow profitably and drive our business model in the interim.

Moving over to Slide 8. It's worth emphasizing the market dynamics that drive this demand at a higher level. We're encouraged to see OEMs admit in their most recent investor presentations and events that the current nickel and iron-based chemistries, along with the 3 predominant form factors are what the industry has to work with over the next 10-plus years to address global EV demand. We've been saying this for the past 2 years in response to random news articles reporting one potential battery breakthrough after another that is many years away from being validated, let alone to a point in which it can be implemented into a production vehicle.

The last 20 years of battery development and industrialization have taught us that battery advancement is easier said than done. Our team stands ready with solutions for all the chemistries and form factors in play. If push comes to shove, we can also have a solution for cylindrical cells, and our team has one under development for an OEM that is willing to cluster some cells to provide thermal runaway and propagation protection. We also continue making inroads commercially on prismatic cells.

In this quarter alone, our PyroThin pursue team landed Mercedes-Benz through a new award with ACC. Mercedes-Benz is committed to its electrification efforts and we look forward to doing everything we can to serve them across a range of potential form factors and chemistries in the future. If we look at the 2 sets of bars, on the middle and the right side of the slide, one can see that in the North American and European market where EV production is expected to increase fivefold from 2024 to 2030 to 15.7 million vehicles. In 2030, 86% of these are expected to have pouch or prismatic cells.

With the remaining 14% cylindrical cell vehicle split with 2/3 of that demand from Tesla and the remaining 5% of the market split across all other OEMs. The body style, size and energy demand requirements of vehicles in North America and Europe drive a mix of high nickel base chemistries today of approximately 92% of the market, and even with some expected gradual improvements in the charging speed and energy density of iron-based chemistry cells, these are only expected to carve out 27% of the North American and European market in 2030.

All these forecasts are obviously directional. But we believe that even if we take a very conservative view and assume content per vehicle of \$350 per car in 2030 times 86% of a 15.7 million vehicle North American and Europe EV production market, we end up with an over \$4 billion annual market that are expected, 2024 revenues of \$315 million can grow into. This opportunity is what motivates our team to continue executing in this segment and to make sure that the timing, size and gearing of our investments enable us to continue on a path of profitable growth after all the work that it's taken for us to get to this point.

And with that, I'm happy to hand the call back to Don.

Donald R. Young
President, CEO & Director

Thank you, Ricardo. Before we move to Q&A, we want to comment briefly on the recent elections. The answer to most related questions we expect to receive from you today, the answer is we are not sure. As the nation transitions from campaign rhetoric to policy shifts, we will remain agile. Over the past decade, climate policy has become inextricably intertwined with energy policy, economic policy and foreign policy. And at the same time, hundreds of billions of dollars of capital have been invested in the United States and around the world.

We believe change will come, but that it will be constrained by these complexities, and that will take time. We will continue to focus on profitable growth for both our Energy Industrial and PyroThin Thermal Barrier businesses. Our Energy Industrial business is well positioned, especially with strong value propositions in Subsea and LNG. And it is important to note that we launched our successful PyroThin Thermal Barrier business during President-elect Trump's first term and that we intend to continue to grow the business

during his second term. We are executing our profitable growth strategy at a high level. And furthermore, we are well capitalized with a strong balance sheet. We believe we are positioned to thrive and to win. Ezra, let's turn to Q&A.

Question and Answer

Operator

[Operator Instructions] Our first question comes from Eric Stine with Craig-Hallum.

Eric Stine

Craig-Hallum Capital Group LLC, Research Division

So I can definitely appreciate some nature being not clear on what the election means and a lot of moving parts. But could you maybe just go through the DoE loan, the steps that are needed from today through first quarter when you were expecting a close? And then maybe just talk about your thoughts on funding once it is closed in a new administration where there's obviously been rhetoric and pushback against EVs and that sort of thing. Again, I mean, I know this is a really difficult question to answer, but I do know that's top of mind for investors.

Ricardo C. Rodriguez

CFO & Treasurer

Yes, I mean, I'm not sure how informative any speculation around how things could develop over the next several months would be. All we know today is that the conditional commitment milestone is a meaningful one. At that point, the funds are earmarked for this purpose. And so let's not lose sight of that, right? Then at the same time, I mean, I think we're all for team America winning here as we try to leverage our platform into supplying OEMs around the world. And we're confident that we can drive alignment around that. Our goal is to produce this in America with our plant in Georgia. And I'm pretty sure that we can drive alignment around that over the next several months. And I think other than that, we'll -- as Don mentioned in his remarks, right, we'll be agile, we'll work with whoever we need to work with make this project a successful possibility and to deliver it.

Donald R. Young

President, CEO & Director

I would just add, Eric -- sorry, Eric, I was just going to add that this project is a significant benefit to Georgia. It's important to remember that it is a loan. We're a debt worthy company that will pay back the loan. And so it has a category, I think, of its own relative to -- again, some of the campaign rhetoric that was so prevalent over the course of the past 6 months.

Eric Stine

Craig-Hallum Capital Group LLC, Research Division

Yes. And that's a key point, and it's it is a loan and also that -- I mean the funds are already set aside, right? I mean this is there, you just need to close it to get that.

Ricardo C. Rodriguez

CFO & Treasurer

And then the other point on EVs, just to add one thing, Eric. I mean once you drive one, it's tough to go back to one, if you can live within the range limitations and the infrastructure evolves. So we just don't -- I mean, even in this world of uncertain geopolitics, it's tough to see a world in which China has already made the leap to EVs. And Chinese consumers are loving their EVs, right?

So for us to imagine a world in which the U.S. goes backwards on this, I just don't see how that's progressed for consumers. And we do believe that consumers will -- after they drive an EV and EVs make their share here. Like they're not going back to burning diesel. And then we also have Europe to work with as well. And Europe has been pretty steadfast on some of the mandates that are driving vehicle development towards electrification.

Operator

Our next question is from Colin Rusch with Oppenheimer.

Colin William Rusch

Oppenheimer & Co. Inc., Research Division

Thanks for the detail around some of the customer dynamics and the opportunity set on geometries. Could you guys talk a little bit about how quickly and how dynamic some of the platforms are adjusting to the macro environment, we're seeing any number of OEMs change platform time frames and some of the design elements and potentially bringing some products forward faster, pushing ramps out. But just want to get a sense of those customer engagement dynamics and how it might translate into timing for these launches and your content in some in these vehicles.

Ricardo C. Rodriguez

CFO & Treasurer

Yes. So we see within the current awards, we see the OEMs pretty steadfast focused on launching those vehicles. But where they are struggling is on execution, right? As we mentioned, I think everybody is realizing that launching cell manufacturing at scale and then EV manufacturing at scale is easier said than done. Each of these OEMs is going through their version of production health, right? Then when we're looking at programs that will launch in 2027 and beyond, I do think that there, we are seeing the OEMs just be more thoughtful around how to more leverage the investments that they'll make then to be more efficient. And so we do see quite a bit of opportunities for them to adopt sell to pack designs and that are a logical fit for what we supply. We see them all very focused on safety, way more than they were 2 years ago, and that is not changing.

But I do think that once the noise around policy here settles down one way or another, we're going to get a lot more clarity around how steadfast they will be with the investments for 2027 and beyond. And you see that in our case as well, right? If you look at how we are managing plant 2, we're -- we've done a lot of work to bring the breakeven point on that so that it's accretive to be as low as possible. And then we're taking it step by step. And I think that same agility is the way a lot of the OEMs are going to manage their EV investments over the next 3 years.

Colin William Rusch

Oppenheimer & Co. Inc., Research Division

That's super helpful. And then just on the CapEx number for the Statesboro plant, it's a pretty big delta with that \$160 million. I just want to understand what the variables are there that we can track. Is that just a construction contingency that you guys have in place? Or are there some other elements in that, that we should be thinking about for the delta in those numbers?

Ricardo C. Rodriguez

CFO & Treasurer

Yes. I think the contingency is one, the main element is probably speed to summarize it, right? If you -- if we want it fast, it'd be more expensive if we want it sooner it would be on the lower end of that range. And so for us, that really depends on just really when we make the decision, when we close the loan and when we need that supply buy, right? So I think that's what will determine where on that range we land through this speed.

Operator

Our next question is from George Gianarikas with Canaccord Genuity.

George Gianarikas

Canaccord Genuity Corp., Research Division

Somewhat related to the change in administration -- but if you could give us an early glimpse potentially to 2025, there's a lot of puts and takes, obviously, with the GM ramp and also the potential for a pushback EV mandates. How should we be thinking about the bridge from 2024 to 2026 and beyond.

Ricardo C. Rodriguez

CFO & Treasurer

Yes. I think we commented on 2026 during the last call, if the current regulation mandates and incentives stayed in place, right? So it's definitely up and to the right. And we -- under that scenario, we do see OEMs having to increase their EV mix and in many cases, more than double it. Now as we plan for 2025, I mean, we do see steel production rates holding up closer to our expectations. But it is a bit early to guide for 2025. So I would say stay tuned here for -- definitely before the end of the year, we'll have a firmer view on what our outlook for next year and how that walk to 2026 will look like.

Donald R. Young

President, CEO & Director

I also think, George, as I commented in my closing remark, it's complex, and it will take time to change policy, to unwind policy, to create new policy, to implement policy. And so I think it will be something that plays out over the course of 2025 before we can really get clarity, not just our situation, but the situation more broadly.

Operator

Our next question is from Alex Potter with Piper Sandler.

Alexander Eugene Potter

Piper Sandler & Co., Research Division

Great. A lot of good color in the call today. I was hoping you could talk maybe first on the STLA medium platform, I guess, also related to that, this Mercedes announcement. I know all of that relies on ACC, this battery joint venture sort of ramping up. Any color you can provide on how that ramp is going. You mentioned production hell for these big battery plants. I know that both the Stellantis and the Mercedes platforms are going to require that plant to come on.

So is it -- do you anticipate something similar to what happened with Ultium, right, where they had multiple quarters potentially of delays or scrap issues or I don't know. I know it's maybe difficult to put words in the mouth of your customer. But any color you can shed on the ramp there would be helpful.

Ricardo C. Rodriguez

CFO & Treasurer

Yes. I mean we're in the middle of that, right? When we won some of these awards, the start of production expectations were in 2024, but then when we were translating that into our revenue planning and some of the investments that we have to make in Mexico to ramp up these programs, we were betting on more of a second half of 2025 start of production. It's what we've been saying all along here for the past couple of quarters since we won those awards -- since when the Stellantis award. And we believe that, that pretty much hedges away some of the risk here that we see in terms of being able to ramp up. And so we do still see line of sight to these awards being able to ramp up in the second half of next year. And I think that captures any of the operational risk that we're seeing today.

Alexander Eugene Potter

Piper Sandler & Co., Research Division

Okay. Great. That's good to hear. And then just from a revenue recognition standpoint, from Aspen's perspective, and I know the timing of product shipments and things like this all come into play here. But let's say that you're correct that I don't know, late 2025 is when that platform launches. Does that mean you start shipping product and recognizing revenue in early 2025, mid-2025 or when you say late 2025, is that when you expect to start shipping product and the vehicles will be in showrooms in 2026.

Ricardo C. Rodriguez

CFO & Treasurer

Correct. We're basically saying that we don't expect revenues from these programs until the second half of 2025.

Alexander Eugene Potter

Piper Sandler & Co., Research Division

Okay. Perfect. That's good clarity. And then maybe 1 last one, if I can sneak it in. Content per vehicle roughly on the Mercedes platform? How does it compare versus GM and some of the other programs that you've been aligned with?

Ricardo C. Rodriguez

CFO & Treasurer

Right along the lines of all of our other prismatic programs, so in that \$300 per vehicle range.

Operator

Our next question is from Ryan Pfingst with B. Riley.

Ryan James Pfingst

B. Riley Securities, Inc., Research Division

I'll ask about the legacy business here. Could you just size what annual revenue capacity for Energy Industrial looks like today after the expansion? And how should we think about the potential timeline for doubling revenue for the segment?

Donald R. Young

President, CEO & Director

I think we have -- as you know, we've been operating well, last quarter in the high 20s with the turnaround, we've made it into the 30s. We've made it into the 40s onetime and indicated this current quarter, it's likely to be in the \$40 million plus range. Capacity today, it's really a combination, Ryan, of making the lines fully -- more fully efficient and productive, if you will. And second, qualifying the full range of our products in that facility. We delivered -- I believe it was approximately 85% of our revenue last quarter from that facility. That's really, in part, a function of not only throughput which we've improved upon, but also product qualification, which we've also made progress on here recently.

So to answer your question, we believe that we can make our way into the \$50 million per quarter range as we work our way through 2025 from a capacity point of view. And in terms of doubling the size of that business, we think our team is geared to doing that within a 5-year period of time. So again, at the current margins that we're operating at, which were plus 40% this past quarter and the quarter before.

Ricardo C. Rodriguez

CFO & Treasurer

Yes. I mean on the supply side, if you look at our implied guidance for in this segment, we would need to be running at \$168 million annual run rate to deliver \$42 million in Q4. And so that will be a judgment day here for us in terms of our ability to get to that point and beyond.

Donald R. Young

President, CEO & Director

As I said in my comments, Ryan, demand remains strong. we continue to see LNG activities at robust levels, and we're engaged with many, many, many of those projects and we talk about policy shifts and what have you, one can make the argument that the policy shifts that are likely to come from energy policy are in our favor.

Operator

Our next question is from Tom Curran with Seaport Research Partners.

Thomas Patrick Curran

Seaport Research Partners

Assuming there is no attempt to negatively intervene or somehow disrupt the DoE LPOs process for advancing your loan towards a financial close, and what sounds like the accelerated timeline you expect to be on relative to most of the other loan recipients. It sounds like you think you'll be able to get to a financial close pretty quickly. And that in turn means you're not only going to be in the driver's seat with regards to right timing, Plant 2, but also going to be able to enhance and sort of maximize your visibility on rightsizing it and determining where you should come in at between that \$1.2 billion to \$1.6 billion of annual production capacity.

As part of that, Ricardo, given how state-of-the-art the facility is going to be the fact that it's going to be able to produce aerogels at 25% lower than the operating cost of any of the existing aerogel manufacturing capacity out there. Are there any key gating items equipment-wise, technology-wise that are going to determine how fast you'll be able to move. Obviously, it sounds as if closing for the DoE LPO loan isn't so much the issue anymore. I'm just wondering if there's anything related to this facility being state-of-the-art that could be.

Ricardo C. Rodriguez

CFO & Treasurer

Yes. So the funny thing is that a lot of this equipment was procured back in 2021, and it's been there on site for at least a year at this point. So the project today -- and we have -- we actually have a picture of it in the appendix of the deck is it's really more around finishing the building, finishing the piping, the electrical than sourcing equipment. A lot of the equipment is actually being stored there on site already.

Thomas Patrick Curran

Seaport Research Partners

Got it. So there's no key pieces of technology or automation or anything that you have in order to get and could become a supply chain pain point?

Ricardo C. Rodriguez

CFO & Treasurer

Correct. That's correct. Yes. So we have flexibility there. And as we mentioned, we can bring up the plant anywhere between 12 to 18 months from when we decide to restart it at full steam.

Thomas Patrick Curran

Seaport Research Partners

Great. And then just as a follow-up, I'll give legacy business some love as well along with Ryan there. Don, could you update us just on sizing how the LNG business is growing -- quantify it somehow for us in terms of its contribution this year versus last or maybe expected next year versus this year? Just on the demand side, when you talk about how you're essentially trying to grow your capacity to meet the demand, how big of a driver is LNG becoming as you ramp here?

Donald R. Young

President, CEO & Director

You don't have to go back very many years when Cryogel was roughly 10% of our product mix. And today, we're roughly 30% of our product mix coming out of that product line, driven principally by LNG and other gas processing activities. I can see that continuing to grow and perhaps into the 40% range. But I think that would be a very logical spot for it. I would just say, Tom, that -- the -- when we started on the LNG side, we were doing maintenance work, demonstrating our capabilities, participating in turnarounds, working our way into specifications. And we continue to do a fair amount of maintenance work, but we're also competing for the big projects as well.

And when you see big Cryogel orders, they can be pretty lumpy and consume a lot of a manufacturing plant for a period of time. So part of our turnaround that we talked about at EMF was geared to higher productivity levels of Cryogel materials. So I just raised that point just consistent with your question,

it is becoming an increasingly important part of our mix, now 1/3, and it could very well be 40% of our business. And in any given quarter, it can obviously spike up from there. But I think that's a good way of thinking about it.

Thomas Patrick Curran
Seaport Research Partners

Yes. That's exactly what I was looking for in line with what I expected.

Operator

Our next question is from Jeff Osborne with TD Cowen.

Jeffrey David Osborne
TD Cowen, Research Division

Just 2 quick ones. Just a clarification. Is the 25% lower production comment in Georgia. Is that -- you mentioned relative to other facilities. Does that include your Rhode Island facility? Or is the cost structure comparable to that facility?

Ricardo C. Rodriguez
CFO & Treasurer

Yes. So that includes Rhode Island, EMF and several other facilities that we've benchmarked.

Jeffrey David Osborne
TD Cowen, Research Division

Got it. And then another quick one here, Ricardo. The Audi platform, I think their battery suppliers had some struggles. How should we think about the launch cadence there, which I think was originally scheduled for the second half of next year?

Ricardo C. Rodriguez
CFO & Treasurer

Yes. Same thing. I mean I do -- I think that by I'm not expecting those revenues until the second half of next year. I think that's our hedge. If you go back to the announcements when that vehicle was announced, they were expecting it to start production this year. And that could very well still happen. I mean our prototype volumes to them have increased here over the past couple of months, but we don't expect full volume production until the second half of next year.

Jeffrey David Osborne
TD Cowen, Research Division

Got it. The last one is just -- and I recognize, as Don said in his prepared remarks, there's a lot of uncertainty with President Trump. But have you started exploring alternative over backup plan, so to speak, in the event that the LPO office ceases to exist after the 20th of January in terms of like reengaging with GM on the debt facility that you once had or other alternatives that might be non-dilutive capital?

Ricardo C. Rodriguez
CFO & Treasurer

No. We're really engaged here, sprinting ahead to get this done in Q1.

Operator

Thank you very much, everyone. That marks the end of the question-and-answer session. I will now hand back over to Don for any closing remarks.

Donald R. Young
President, CEO & Director

Thank you, Ezra. We appreciate your interest in Aspen Aerogels, and we look forward to reporting to you our fourth quarter and full year 2024 results. Be well, and have a good day. Thanks again.

Operator

Thank you very much, Don, and thank you, everyone, for joining. This concludes today's call. You may now disconnect your lines.

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