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<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Good afternoon, everybody. My name is Steve Barger. I'm with KeyBanc Capital Markets. I cover Industrial Machinery and Semi Cap Equipment. And with me today are the team from Advanced Energy Industries, Steve Kelley, President and CEO; and Paul Oldham, EVP and CFO. Before I start with the questions, I'm just going to hand it over to Paul for a quick Reg FD.

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

Yeah, I just want to remind any – everybody that today, if we make any forward-looking statements that they're subject to a number of risk factors, and we'd encourage you to have a look at our filings for a broader discussion of that. Obviously, we just had a earnings release last week, so we're not updating any financial information at the discussion today.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Very good.

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

Thank you.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

And Steve, for those in the audience, you might not be as familiar with Advanced Energy. Can you give us a quick overview of the company?

<<Steve Kelley, President and Chief Executive Officer>>

Sure. So we're located here in Colorado. Our headquarters are in Denver, and a large part of our technical team is in Fort Collins. The company was formed 42 years ago, and the core of the company is providing precision power solutions for makers of plasma chambers. So typically semiconductor equipment makers like Applied and Lam. So we've done that now for 42 years. We've also, over time branched out into new areas, but the one point in common is the delivery of precision power to high-end applications. So in addition to semi equipment we're heavily involved in industrial medical applications, data center type power racks, and then telecom and networking applications.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Great. And Paul, as you mentioned, you just reported last week, can you give us a quick update on the 2Q performance and what you're expecting for the back half?

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

Sure. So revenues for the second quarter, were above our expectations. I think one comment we made is, our diversification of strategy is working, and so we saw record industrial medical revenues largely offsetting the anticipated decline in our semiconductor markets. So revenues were down about 2% sequentially, and 6% year-over-year. That's substantially better. It's frankly, than we performed in previous down semi cycles and it's because of the diversification efforts that Steve mentioned.

Overall, we think the second quarter was the trough for our semiconductor market. We expect to see the second half flat to up from the first half, which means Q3 would be higher, and then Q4 would be higher than Q3. In the rest of our markets, in the industrial, medical and other markets, which is about half of our business right now. We expect that to be up slightly now for the year. Previously we thought it'd be about flat or steady. So it's proven to be a nice ballast for the company, and we actually think it'll be up a little bit because we had a very strong first half. Second half, we'll see a little bit lower in total just because we got a lot of parts in the first half, particularly in telecom and networking that helped us have a little better performance.

And so overall, that strategy is working. Our earnings also beat our expectations. We're able to bring our cost structure down a little bit and looking forward, we expect our gross margins in the third and fourth quarter to improve a little bit sequentially in each of those quarters.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

So if the front half was helped by supply chain easing up, is the back half more characterized by demand or is it still supply?

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

I think if you look at the semiconductor market, demand is actually picking up a little bit. There's some reasons for that. China, I think there's more clarity about what our customers can ship into. So we're seeing some pickup there. The trailing edge continues to be quite strong, and so there's some opportunity there. In our other markets, industrial, medical for example, we're in a variety of things and some markets are stronger than others, but in general, that's holding up and there's still ability to ship against some backlog there.

And then finally in data center it's interesting, it's been flat for the last quarter or so, but what the dynamic we've seen is softer general server demand, but a pickup in demand related to AI servers and applications. And that seems to be, picking up a little bit. So we could see a little bit of pickup in the second half in the data center market.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Well, AI is definitely a big theme of the conference here this year. Any other comments on how you see AI driving demand for your products? You mentioned data center, when can we receive the tipping point for 48-volt power supplies?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. So the good news for us, when it comes to AI is that it consumes a lot of power. And so when we look at a data center rack, an AI enabled rack with a NVIDIA chip is going to consume somewhere between three and five times the power that it conventional rack would consume. So that's good. What that means is it puts a premium on efficiency; it puts a premium on power density, and also premium on reliability. So those are three areas where we excel.

The other thing it does is it moves the needle on 48-volt, because you move to 48-volt, you become more efficient and you'll consume less current, which is important, particularly with power charges today. So, we think on the data center, it overall, it's a good thing for us. We saw some positive upsides last quarter, from some of our customers who were involved in that particular part of the space.

As Paul mentioned earlier, it's also good news for semi equipment customers. And a lot of that is due to the fact that these artificial intelligence processors are very large, and so they tend to consume a lot of silicon, and that's good for equipment makers and therefore good for us. The second is it consumes a lot of high bandwidth memory, HBM, and so that's good for the memory makers and again, good for our customers. So, I think AI has been a very positive development so far this year, but it'll get better moving forward.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

And what's your share in 48 volt right now?

<<Steve Kelley, President and Chief Executive Officer>>

I don't know what our share is exactly. It's pretty new, so there's no TAM out there, but we were certain that the leaders in 48-volt, so we're getting more than our fair share, I think right now.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Yeah. That's good. And let's just talk about the broader cycle if we can. How would you characterize this down cycle relative to past cycles? And what are the leading indicators that you look for to make you think that we really are coming out of this?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. So, I've been involved in semiconductors for many years, and I've been through a lot of downturns and upturns. I would say the first thing to characterize this cycle is just the sheer size of the market, right? And it's hard to talk about semiconductors as a monolithic market anymore.

So the way I think about it, I think about it three parts. First is the biggest part of the market, which is the older technologies. The second is memory, and the third is leading-edge logic.

And so what I've seen this cycle is that the mature markets have stayed strong. In fact, I think those markets will be up this year, which is unusual, right? That you don't typically see that. I think part of it was due to some of the continuing supply shortages, but part of it is underpinned by just strong penetration through all markets of ICs, and most applications don't need leading-edge ICs. So, I think that's probably the most positive part of this particular downturn.

In memory, this is a cyclical market. We all know that. It's been a pretty severe downturn, but it'll come back. So the only question is when, and the current prognosticators are saying sometime next year, NAND and DRAM, probably recover at different rates at different times. The last part is leading-edge logic, and today the applications that drive consumption are the smartphone and then high performance computing/AI.

I think high performance computing is doing fairly well. At least NVIDIA is, right. I think AMD and Intel are as well, to a lesser extent. But we need to see a comeback in smartphones to really get the advanced logic market back to where it should be.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Yeah. There's been a lot of debate about what the shape of the recovery could look like as we go into 2024. Do you have an opinion on what that could look like?

<<Steve Kelley, President and Chief Executive Officer>>

My opinion is that it's going to recover gradually in semiconductors.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Gradually?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. So that's the way we're planning financially, but then I also recognize I'm not a very good forecaster. So we're also hedging our bets. So we're maintaining probably a higher employee count than normal in our factories. And we're maintaining more inventory than normal so that we're able to accommodate a faster snapback. We don't want to repeat what happened in 2020.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Right.

<<Steve Kelley, President and Chief Executive Officer>>

So financially, plan for gradual, but from an operational standpoint, be ready for a faster upturn.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Any other ways that AEIS positioned differently this cycle relative to prior cycles?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. I think having lived through the supply shortages for the past two and a half years. We've spent a lot of time with our customers qualifying alternative parts, doing redesigns and doing some extraordinary things together, right? So, we've – I think we have a stronger relationship with our customers, but also I think our supply chain is better defined and more diverse. So, I think, we have a much better strategic supply chain than we did two and a half years ago.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

And I know your target is to grow the semi business at 1.2 times faster than WFE through the cycle. What drivers are going to enable that outperformance?

<<Steve Kelley, President and Chief Executive Officer>>

I think the biggest one is going to be our new products.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Yeah.

<<Steve Kelley, President and Chief Executive Officer>>

So, the tactical share ebbs and flows depending on what market is strong. But over time in our industry, right, our customers will pay for technologies that improve throughput through the fab and improve yield. And so for our customers, the number one challenge is, how do they do that sub-two nanometer. So these really fine geometries, it's very difficult. And so we just introduced two technologies that have been in the works for years. We've been working on them, and we launched them more or less simultaneously in the first half of this year called eVoS and eVerest, and I won't get into the technical details.

But what they do is exactly that. They give our customers the ability to really apply the plasma where they need to without damaging the wafer. And they increase wafer throughput. We reduced downtime and they're very excited about it. So the feedback we've received from our customers on these technologies is really positive. So currently we're engaged with most of those customers basically taking our platforms and tailoring them for our customer's needs.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Now, is this more focused on deposition or etch, and can you talk about what you think this could do for market share?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. This is suitable for both etch and deposition and, we think it allows us to grow market share if we're successful. We've been, I'd say underpenetrated and in dielectric etch, and this technology gives us a chance to become a factor in that sub-segment. I think we can also grow share and conductor etch and in deposition where we're already strong. But I think over time it's a very good marker for us.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Would you see that on design wins? Or will you see that immediately when the cycle starts to inflect?

<<Steve Kelley, President and Chief Executive Officer>>

I think we'll see it starting in 2025.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Okay.

<<Steve Kelley, President and Chief Executive Officer>>

So, these technologies take time. We're through an initial evaluation phase, narrowing the tailor phase, and then you get the qualification phase. So, I think you're probably talking 2025 before we start to see meaningful revenue, but then it grows from there through 2030, and so, yeah, I think that's how it'll play out.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

And I want to switch gears to industrial and medical. As you said, it's been very strong. Can you talk about what you see for the back half for those two markets specifically?

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

Sure. Those markets serve a lot of different areas and we've seen strength, particularly in things like battery applications, factory automation, material science type applications for deposition of specialty materials. Those have been areas that have been particularly strong for us, but it's a wide market. Lighting hasn't been quite as good, but that's an area where I think there's a lot of market, market opportunity for us.

So when we look into the back half of the year, we continue to see some pockets of strength and some areas that'll be weaker and they've largely offset each other. We also have the advantage, at least for a while, our backlog, we're fully booked out for the third quarter and starting into the fourth. So we have a little bit of backlog we can continue to fill as we continue to get some critical parts. So we're optimistic that that market sort of stays in there. Look, the last two – three quarters practically have been records for us in that market. We think it will continue to perform well.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

And when you think longer term, I mean, I they're enormous end markets, right? Much bigger. What do you think the organic growth rate is through the cycle or when you think about a normalized basis?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. So, I think the bottom line answer to your question is, I think we can grow our market share in the coming years. So we can probably grow at least twice as fast as GDP in industrial medical. And the reason why I say that is, we made a decision a couple years ago to focus on these markets, and it's a different selling proposition than selling into semiconductor or data center. So it's a broad market. There are thousands of customers. And so we changed the way we compensate our sales force. We also moved a lot of our engineers into industrial medical to increase the size of the pipeline of new products, and also to enable us to customize these products for smaller and medium-sized customers.

And so we're starting to see the fruits of that effort this year. And I could say our design win pipeline is probably 3x what it used to be a year ago. This is an interesting market for us, because of our engineering resources, our factories, our service levels, we can compete very effectively with our smaller competitors in industrial medical.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Can you talk about the acceleration of product wins? As you've reoriented the sales force and changed the incentives, how is that playing out and what are next steps as you start to take that market share?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. So basically half our sales force only gets paid on industrial medical design wins and revenue. And so, they've spent a lot more time hunting and calling on smaller and medium sized accounts. So that's the big positive. The other thing we're doing is, I think we're engaging more directly with distribution because the channel is very important in industrial medical about half our business goes through distribution, another half goes direct.

Then we've invested quite a bit in a new website. Because we had kind of a fragmented presence on the web, and later this quarter we'll be launching this new website, which brings all of our products under one roof essentially. It makes it easy to figure out what we make and how what we make could apply to your design and to your segment. And then in Q1, we'll be moving to a full e-commerce capability as well. So, I think that moves us to the front of the pack when it comes to the industrial medical market.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

So when you talked about e-commerce capabilities, are you letting people spec product on the website? And are we talking about modification of standard products or designing new products?

<<Steve Kelley, President and Chief Executive Officer>>

I think on the website it's going to be standard products. You could order off the web and then once you're able to evaluate the standard product, we'll engage with you on what we call the modified-standards. But that will require some assistance from either a salesperson at Advanced Energy or one of our distribution partners.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Yeah. Do you have the relationships you need through distribution? I know that's a newer part of the strategy for you?

<<Steve Kelley, President and Chief Executive Officer>>

I think we do. I think we're stronger in some areas weaker than others. But it's been a focus area for us. I think as some of the IC makers have squeezed distribution, the margins it's become more lucrative, more attractive for the distributors to sell system products like we offer.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Yeah. I'm going to shift to supply chain. Just in the interest of time, can you talk about, is it back to normal? Are you still seeing shortages anywhere? I know seeing that unlock helped your first half a little bit. Just any color you can give around supply chain.

<<Steve Kelley, President and Chief Executive Officer>>

Yeah. Supply chain is considerably improved from a year ago. And I mentioned on the call last week, we still have some supply chain issues. Power MOSFETs are still difficult to get some of the median voltage, high voltage power MOSFETs, a few of the microcontrollers, some of the analog. Basically it's all older processes and many of these products are fabricated on kind of orphan nodes. So, I think that'll be cleared up by the end of this year. But we knocked down the semiconductor segment first that went away in December of last year. Now, we're focused on industrial medical and some of our high volume products.

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

And I'll just comment on that. As the supply chain's gotten better, the premiums that we're having to pay for these parts is also contracting as well. You alluded to that. The premiums, which are what we call the cost we have to pay when we can't buy the part through the normal supplier, we have to go into the open market through a dealer or a distributor or somebody.

Those have probably been cut by about half from where they were a year ago. So that’s good news. That’s helping our P&L that we think that will continue to improve over the course of this year. And into the early part of next year.

We see a little bit of a delay impact, because all those parts have to roll through inventory, right? So it takes an extra quarter or so, but the good news is, we’re seeing that happen. We’re seeing that narrow and it’s helped us, I’ll say hold margins roughly flat on much lower volumes as we go through this cycle. And as we look forward, I think, and volumes start to recover now, you’ll see those material premiums continue to contract and then, really get the full benefit of the volume recoveries.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

And on the call last week, you announced plans to start a new factory in Thailand. Can you just share with us the rationale for the investment?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah, yeah. So we’ve taken a look at our long-term plan and determined that we need a large scale factory. So the dynamic of that is that, our China footprint is shrinking dramatically. So a year ago we had three factories in China. Now, we’ve closed one of those, we’re closing another one this year, and then we’ll downsize the third to a China for China proposition. And so in addition to Malaysia and the Philippines, we need a third site in Asia. And the Thailand looked good. It’s got a good labor supply, good incentives, and we have subcontractors that are located close to our site. The other part of our strategy is North America.

So when we purchased SL Power last year, part of that purchase involved a factory in Mexicali. And what’s happened over the past year is a number of our customers have indicated a strong desire to manufacture in North America. And so we’re expanding that factory in Mexicali, probably quadrupling the output over the next two years. And so at the end of the day, we’re going to have four main factories, Mexicali, Thailand, Malaysia, and the Philippines.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

What’s driving the motivation for them to want more manufacturing in the Americas?

<<Steve Kelley, President and Chief Executive Officer>>

A lot of it is down to logistics. If they’re supplying customers in North America, it makes a lot more sense to build a North America. The other part is co-location. So some of our customers are building factories in Mexico and they’d rather buy in country.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Sure. Just keep that supply chain a little bit shorter.

<<Steve Kelley, President and Chief Executive Officer>>

Yeah.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

We can shift to some financials, gross margins. What actions have to be taken long term to get back to the, the 40% plus that you target?

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

Yeah, I think it's three things in the relatively near term, meaning the next several quarters and the fourth one in the longer run. But the first thing is obviously to continue to see material costs abate. That's happening. I think it's going to continue to happen. It'll be gradual over the next, two to three quarters where we'll see some – you'll see the 150 basis point impact continue to narrow and eventually go away. I think that's the first thing.

The second thing, there's a lot of things that we're doing internally to improve our margins. So Steve mentioned some of the investments we're making, those investments actually help us to optimize our factory footprint around those higher, those larger scaled factories. And we have a lot of boutique and other sites that we're basically moving products from those smaller sites into our larger sites. That focus will actually add another a 100, 150 basis points to gross margin over this period of time.

And the last thing is, we see volumes begin to recover back, up – another 10% or 15% up into the mid-to-high $400 million range. We should get another a 100, 150 basis points out of that. All of that gets us about to 40%, which is kind of the goal that we've set for ourselves. But we want to do better than that. In fact, we've said our long-term goal is to be at 40% or better in good times and bad. The key to us getting there is to continue to drive our portfolio and optimize it, which we've done a lot of, but we can do more. Our new products continue to work ourselves out of some of the lower margin products that we're in today and or improve pricing.

And then continuing to drive some of the NPI and other activities, we think we'll shift, continue to shift that mix in our favor and bring us another, say, a 100, 150 basis points. So that's the goal. Get over 40 and be able to sustain that in good markets and bad. That will take a little longer than that timeframe. But we're very optimistic about it.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Yeah. And I guess to that point, we only have a minute and a half left, but you've always been a strong cash generator, M&A has been part of your history. You haven't done a deal since SL Power, which I think was April of last year. Can you talk about M&A as part of your future?

<<Steve Kelley, President and Chief Executive Officer>>

Yeah, we're definitely a hunter, right? So we're going to continue to acquire companies where it makes sense financially and strategically. We want to stay in our lane. We want to stay in the power business, the high end power business. So we like companies that have penetration into industrial, medical, semiconductor equipment, customers. We like a high percentage of sole source revenue like us. And we're looking at larger acquisitions because the challenge of integration can be about the same for larger and smaller acquisitions. So we'd rather get more revenue, more bang for the buck.

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Right. Well that's great. Any final thoughts that you'd like to leave with people? We're just about out of time. Oh, sorry. One quick question.

Q&A

<Q>: [Question Inaudible]As a play between the different markets that you serve. Are the products pretty standardized across, basically the plasma chamber that you sell to semicap can also be, that engineering skill and structure of that line can also be applicable so there's efficiencies, and what end market is driving that?

<A – Steve Kelley>: That's a really good point. I think there are certain technologies that play across multiple segments. I think plasma, the science of plasma generation is a little bit different. But in every one of these generators that we build for plasma chambers, there's an AC/DC front end. And so our latest generation products, basically we took an AC/DC front end from a high volume group and just used it in our plasma generator product. It saved us money, highly modular.

And so I have a CTO and his primary job is to make sure that all the engineering teams are talking and reusing as much technology as possible. And I see it as a key competitive advantage for our company because we're solely focused on power. We really – we have a lot of technologies under a single roof, and it's up to us to combine those in a way makes sense for our customer and also makes it difficult for our competitors to match us.

<Q>: [Question Inaudible]

<A – Steve Kelley>: Yeah. The best margins are in semiconductor, industrial, medical. They all average up the company gross margin. And so that's where we put most of our engineering resource. That's where our investment goes. The high volume business, the data center business, what we've done there is we've become a lot more choosy than the type of business that we, we go after. And so we're biased towards sole source business and also we do a much better job managing our pricing.

<Q>: [Question Inaudible]

<<Steve Barger, Analyst, KeyBanc Capital Markets>>

Thanks very much gentlemen.

<<Steve Kelley, President and Chief Executive Officer>>

Thank you.

<<Paul Oldham, Executive Vice President and Chief Financial Officer>>

Thanks everyone.