



AIXTRON SE

Analyst Earnings Conference Call

First Quarter 2016 Results

April 2016

Prepared Remarks

Martin Goetzeler, President & CEO

Dr. Bernd Schulte, COO

The spoken word applies

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Slide 1 &2 – Operator & Forward-Looking Statements

Operator

Good afternoon, ladies and gentlemen, and welcome to AIXTRON's First Quarter 2016 results conference call. Please note that today's call is being recorded. Let me now hand you over to Mr. Guido Pickert, Director of Investor Relations at AIXTRON, for opening remarks and introductions.

Guido Pickert

Director of Investor Relations

Thank you, operator. Let me start by welcoming you all to the AIXTRON's First Quarter 2016 results of AIXTRON SE. Thank you for attending today's call.

My name is Guido Pickert, Director of Investor Relations at AIXTRON SE. I'd like to welcome our President & CEO Martin Goetzeler as well as our COO Bernd Schulte.

As the operator indicated, this call is being recorded by AIXTRON and is considered copyright material. As such, it cannot be recorded or re-broadcast without express permission. Your participation in this call implies your consent to this recording.

As with previous results conference calls, I trust that all participants have our results presentation slides, page 2 of which contains the usual Safe Harbor statement. I will therefore not read it out loud, but would like to point out that it applies throughout this conference call.

You may also wish to have a look at our latest IR presentation, which includes additional information on AIXTRON's markets and its technologies, and is available on our website.

Please note that due to EU-wide regulatory changes having abolished the requirement of issuing quarterly reports for the first and third quarter, we have decided to streamline our quarterly statement in accordance with the new guidelines issued by the Frankfurt Stock Exchange. We continue to provide the financial statements according to IFRS and discuss the key operational and financial developments in the shorter report.

This call is not being immediately presented via webcast or any other medium. However, we will place an audio file of the recording or a transcript on our website at some point after the call.

I would now like to hand you over to Martin Goetzeler, AIXTRON's President and CEO for opening remarks. Martin?

Slide 3 &4 – 2016 Targets & Guidance

Martin Goetzeler

President & CEO

Thank you Guido, and thank you all for joining the AIXTRON Q1 2016 conference call.

Let me start the presentation by giving you an overview of the key developments effecting AIXTRON as well as a detailed view of our financial and business performance. Our COO Bernd Schulte will expand on particular business topics and then I will close the presentation with a summary of the broader business issues we are addressing in this challenging period as well as how we see our business prospects going forward.

I believe we have made it clear on the AIXTRON 2015 annual results conference call eight weeks ago and on our subsequent roadshows that 2016 would be another challenging year for the company with prospects improving over the course of the year. We also shared with you our view that AIXTRON revenues for 2016 would be in between EUR 170m and EUR 200m. Provided that we reach the high end of our revenue range, I also stated that we expect earnings and free cash flow generation to improve slightly this year compared to 2015 but that we would not be able to achieve positive earnings over the course of the whole year.

Returning to the first quarter which has been every bit as ‘slow’ as we had expected with revenues in particular at very low levels due to the order backlog at the end of 2015.

That all said we did have a solid quarter in terms of cost management, e.g. by cost control and by adjusting working days to the required demand in Q1/2016. In addition, we had a solid order intake.

This leads to the fact that we do feel confident that we will have a strong second half to the year and that we can therefore meet our guidance for 2016 which we did confirm as you can see on slide 3.

However – there is still work ahead of us to reach our targets.

Please turn to slide 4 for an illustration of our revenue guidance: We have reported revenues of EUR 21.4m for Q1/2016;

Our shippable order backlog amounts to about EUR 68m;

We believe based on our experience that we can sell spare parts and services worth EUR 11m per quarter which sums up to EUR 33m for the remainder of the year;

This means we will have to secure additional shippable orders by approximately September worth EUR 48-78m. These orders we expect primarily from application areas like Silicon, Opto, Power Electronics and some LED.

This is what we expect to execute and this is why we reiterated the guidance for fiscal year 2016. Our advantage is that we now build on a much more balanced portfolio which stretches beyond LEDs into strong growth markets such as renewables, power management, computer memory and batteries. However, as we also confirmed it is important that the market entry and the qualification of our technologies Organic, AIX R6 for LED and QXP for Memory at various customers are successful.

Slide 5, 6, 7– Key Financials 2015, P&L, Balance Sheet

Let's now turn to the Q1 2016 results starting with slide 5 of our presentation.

As a result of the low order intake in the previous two quarters, revenues for the first three months of 2016 were low at 21.4m, down 47% against the EUR 40.3m we generated in the same quarter last year. This is a reflection of the ongoing weak environment particularly in what has been our core market for many years, in LEDs.

The good news is that we had a solid order intake in Q1 at EUR 44.4m which was substantially higher than the EUR 31.3m we recorded in Q4 and the EUR 34.4m from Q3 of 2015. We have been particularly successful with our Planetary technology in areas like optoelectronics for Data and Telecommunication, as well as Red Orange Yellow LEDs (ROY). The result is that we have an equipment order backlog of EUR 67.7m.

On another positive note, we continued to diversify our revenue base which can be seen in our revenue mix in the first quarter. Our largest market was opto-electronic components including lasers, transmitters and others representing 36% of sales up from 5% in the same quarter last year. This was followed by silicon on 26%, LED on 15% with power electronics at 15% making up the remainder.

Let me note that although LED equipment sales were low in the first quarter, we expect them to pick up as the year goes and we continue to qualify AIX R6 Showerhead tools at further customers and expect to receive orders.

56% of revenues in the first quarter came from equipment sales with the remaining 44% or EUR 9.5m coming from the sales of spare parts and services. The percentage of revenues that came from spare parts and services was much higher than normal and is a reflection of the very low product sales in the quarter. On a regional basis, over 70% of total revenues in Q1 2016 were generated by sales to customers in Asia, while Europe accounted for 13% of sales with the remaining 17% coming from the USA.

Turning to slide 6.

In Q1 2016, gross profit was EUR 3.1m and the gross margin was 15% which was down from 31% in the previous quarter and 22% in the same quarter last year. This drop in gross margin was a reflection of the low revenues and thus low utilization rates at AIXTRON. Let me add that we are working intensively to reduce our cost of sales through design to cost as well as efficiency and productivity improvements.

First quarter operating expenses came in at EUR 17.8m which were lower than the previous quarter at EUR 21.1m and in-line with the EUR 17.6m we had in Q1 last year. Compared to last year's Q1 the additional costs for Plasma Si and the comparative negative currency effect were offset by higher productivity, better cost control and a contractual settlement.

The impact of the low revenues and gross margin was that the operating loss increased from EUR -8.8m in the same quarter last year to EUR -14.7m in Q1 2016.

Due to the effects mentioned earlier, EBITDA in the first quarter 2016 came in at EUR -11.7m, which was lower than the previous Q1/2015 EUR -6.4m and the EUR 1.3m recorded in Q4/2015. Operating cash flow in Q1/2016 amounted to EUR -19.4m. The major driver of the negative cash flow was the return of the advance payment to the Chinese LED manufacturer Sanan. The overall result was that free cash flow for the quarter was EUR -20.3m. Without the scheduled San'an payment, we would have been close to break even in cash flow.

Let's now move to slide 7, which shows our balance sheet.

Our balance sheet remains solid with EUR 375.6m in equity and an equity ratio of 84% as of March 31st. We have no financial debt, cash and cash equivalents at the end of the first quarter were EUR 181.9m, down from EUR 209.4m at the end of the 2015. The difference to the free cash flow stems mainly from currency effects of cash held in US-dollars as well as a EUR 4.1m milestone payment in conjunction with the acquisition of PlasmaSi in 2015.

There were no other material changes in the balance sheet over the last three months and in summary, we remain well positioned with a solid balance sheet.

Now let me hand you over to Bernd who will talk about some of our operational highlights of the first quarter 2016.

Bernd?

Slide 8– Operational Highlights

Dr. Bernd Schulte

COO

Thank you, Martin.

Let's now move to slide 8, which shows our operational highlights for Q1.

Let me start with the AIX R6 and how we see the positioning across the LED market. The major news in the first quarter is that we have had the tool qualified at one of the leading LED producers in the world, namely Epistar.

Going forward, we expect the tool to be qualified at other LED manufacturers and we believe that we will consequently see orders for the AIX R6, depending on market conditions. With our G5 planetary reactor, our customers have made significant progress in developing GaN LEDs on large silicon wafers, enabling the potential to reduce LED costs significantly.

It is also worth mentioning that a significant portion of last quarter's order intake was for our AIX 2800 G4 Planetary Reactor for GaAs/InP material for various laser and Red, Orange and Yellow LED applications. The new G4 has been transferred to our latest controls platform IC2 giving the compatibility to the latest in-situ and automation features.

We are also excited about our opportunities in the power electronics area where we are expecting to receive increasing customer repeat orders, noting that our planetary reactor offers customers the best in class solution for producing highly efficient power electronics, which are critical components in end user areas such as electric vehicles or next generation consumer electronics. We have also achieved a great success together with imec, one of the world's leading semiconductor research institutes, which qualified our technology for the manufacturing of their GaN-on-Silicon power devices for high voltage applications.

In the area of OLED production we continue to make progress particularly with the recent commissioning of our Gen8 Demonstrator. We are very excited about this technology as we believe it will enable us to show potential customers how our equipment can help them to cost effectively produce large OLED displays. Besides our OVPD deposition technology, we have our Thin Film Encapsulation technology stemming from the acquisition we have made last year.



With this technology, we can address applications beyond large area displays. So overall, we see medium-term market opportunities for OLEDs going forward with multiple applications from flexible displays, to TVs, to billboard advertising screens and so on.

Finally, we have been developing new production oriented manufacturing solutions of highly pure carbon materials such as graphene and carbon nanotubes which are becoming critical materials for future generation semiconductor applications as well as energy storage devices such as ultra-capacitors and batteries. And the good news is that our equipment is now being used for commercial production of these materials, noting the recent order from the Spanish company, Graphenea for our latest solution to expand their graphene manufacturing capacity.

As you can see - we are making good steps forward, we are achieving important milestones and are prepared to support higher volume market demand with our leading edge manufacturing solutions for existing as well as for future customer product applications.

With that let me hand you back to Martin.

Slide 9 – Summary

Martin Goetzeler

President & CEO

I think that we've already made it clear that Q1 was a 'tough' quarter and that we expect a gradual improvement over the course of 2016. Let me add that we expect 2017 to be a stronger year driven by growing demand across all the markets we address.

Let me also emphasize our confidence in our business model and the strong foundations we have in place to enable us to take advantage of the increasing growth opportunities and the positive order dynamics we are seeing across our markets. This is a reflection of our sustained and focused investment in R&D. That said we will continue to maintain our focus on controlling costs and improving quality. Let me also remind you that we have a strong balance sheet with EUR 182m in cash and no debt with an equity ratio of 84%. These foundations enable us to continue strengthening our existing products and service offering as well as developing innovative solutions for our customers.

Before closing the presentation let me now share some market information with you. The good news is that the LED lighting industry has seen growth of about 35% per annum over the last three years and with global penetration of LEDs in new lighting products sold today approaching 40% there is still major growth ahead. However, many of our customers, the LED producers, are still weighed down by strong competition. Nevertheless, we do expect some growth for MOCVD equipment to return in the course of the year.

This is why it is critical for us to continue to expand our product offering in other high growth markets such as OLEDs, power electronics, silicon semiconductors and carbon nanomaterial structures. We are gaining traction in all of these markets though production qualification is ongoing in several areas. We believe all these areas offer substantial growth potential in the coming years.

In terms of financial guidance, we reaffirm our guidance given some weeks back on the Annual Report 2015 conference call and see revenues this year between EUR 170m and EUR 200m million with a stronger revenue generation in the remainder of the year compared to the first quarter of 2016 which represented a slow start to the year. If we reach the higher end of our revenue guidance, we see earnings and free cash flow generation improving over the course of the year and we expect earnings and free cash



flow generation over the full year to be slightly better than in 2015. Finally, we believe that we can be EBITDA positive in 2017.

Let me conclude by reminding you all of our major priorities this year. First and foremost we need to continue improving and diversifying our technology and product portfolio. Secondly, we need to continue refining company productivity especially in and around production and servicing. Thirdly, we need to finish running tool qualification processes with our customers and to successfully realize our market entries. If we do this we will be able to deliver on our targets.

And with that, I'll pass you back to Guido before we take some questions.

Guido Pickert

Director of Investor Relations

Thank you, Martin and Bernd.

Before we take questions could I ask everyone to limit your questions to a maximum of two each time. This will allow everyone a chance to have their questions answered. Thank you. Operator, we'll now take the questions.

Q&A

Operator

(Operator Instructions) David Mulholland, UBS.

Q- David Mulholland - UBS - Analyst

I just wanted to come back on the end market applications and obviously you've seen quite a good contribution from optoelectronics in Q1 and that was also quite along with silicon last year. I just wondered if you could help us to understand how structural the demand is from those markets. Is this a 6-month to 12-month period of investment and then things could slow down or do you think those markets especially continue to grow from where they are today? And then I'll come back with a follow-up afterwards.

A-Martin Goetzeler

I think what is interesting and what somehow positively impacted in the first quarter again are definitely the applications in the area of optoelectronics in general. We said in our last earning call in February that 2015 was a very strong year for these applications. It is possible that 2016 will be reduced and that's something which we planned for from our perspective. Currently we see a better development than expected. The reason is that we see continued demand for applications, such as data communication, telecommunication, laser applications, and also other kind of sensors.

The other parts of the order intake which developed positively are red-orange-yellow LEDs which are produced, as Bernd already mentioned, mostly on our G4 technology. So, there is definitely some good momentum in these areas. We have to see how that develops over the course of this year and then we can really confirm the trend. Currently it has a positive momentum. Applications in this area I can also add are data communication through glass fiber, proximity sensing in mobile phones, gadgets, and also in 3D sensing. There are a couple of applications where we see increased demand and that's also supporting this order intake. You had a second question, David?

Q- David Mulholland - UBS - Analyst

If I could just come back on the OLED progress, you've now got the tool ready for customers to do demos so I wonder if you could just give us an update on the timing on when you think you might have customers in the lab actually running demos and hence when we might get some understanding of whether you've been successful or can be successful in getting customers to sign up. Another follow up on that: Can you just give us an outline of what your thoughts will be if you're not successful with the customer demos of these tools this year?

A-Martin Goetzeler

I think we have been very consistent in the communication on OVPD organic activities over the last year. Already in our 2015 annual report, we mentioned that we expect an order for the OVPD technology in the mid of 2016, i.e. in the summer of this year. That's still our goal. In order to do so, we are working with the key players in this field which are currently on demos and the timeline, as I told you, through the summer is still the one we are pushing for and which we are expecting. Therefore this is the timeline we want to achieve and we also believe that we will achieve it.

Q- David Mulholland - UBS - Analyst

And just one final question. Obviously the business is still loss making this year given the run rates in LED; do you think there is still enough scope at the current OpEx run rate that the market will improve enough to get you back to profitability obviously as you think into next year or is there incremental work you need to do on the cost base to get you there instead?

A-Martin Goetzeler

I mentioned that we continuously work on improving our bill of material through our design to cost activities, bringing down our service and production cost. Let me focus now on our R&D activities. Before this call, I had another detailed look at what was really the actual numbers on the R&D split. If I consider key new areas like organic, like III-V on silicon for logic and power electronics, we are now even above 60% of spending in R&D for these new technologies. And it's important for us now to bring these products to market and then it will also drive the related topline. Then at a certain point, we will also see lower R&D cost for these applications.

This would basically be the trend for these new technologies. So for us, it's important now to really bring these new technologies to life. I know OLED is around the corner and we have to deliver. As I mentioned, summer is an important deadline. In III-V on silicon, the market entry depends on the customers. We expect orders at the end of next year, but the majority of the growth we will see in 2018 and 2019. There's the reason why we see some improvements in certain areas short term, but a couple of them are mid-term. This is why we are confident that we can have a positive EBITDA in 2017. Our current bottom line is still influenced by the investments into these future products.

Q- David Mulholland - UBS - Analyst

Thank you very much.

Operator

Gerhard Orgonas, Exane.

Q- Gerhard Orgonas - Exane BNP Paribas - Analyst

First of all, I was quite surprised that your free cash flow ex-San'an was quite resilient in the quarter. Are there on the other hand any positive payments that you may have received that figure in this free cash flow or is the only major item in there the payment of around EUR20 million to San'an? That's my first question. And the second question is by when do you need these shippable orders? Do you need the bulk by Q2 or is it still enough when you get your orders in Q3 to deliver it by the end of the year?

A-Martin Goetzler

First, let's go to the second question. I mentioned a September time frame so we have 14 to 16 weeks to fulfill these orders. That could be sufficient for certain products, definitely not for new technology, but for all existing products it's possible and therefore, this is the timeline which we set in order to achieve our revenue guidance for this year.

The second part may be relating to the application group. I mentioned a couple of times that silicon has a little bit different business model. Here we actually get indications about the future demand and we pre-build. Hence between order intake and shipment, there's no more than two to four weeks. The assessment before approval to pre-build is done very diligently; it requires Board approval to release the resources for building these new tools. Under this circumstance, when we have clear indications even of an order intake in November, we can still ship it this year. So, that's a little bit of a different story to our compound business.

The other question - if you look at the balance sheet, you see that our advanced payments went up by about EUR 8 million. That's one of the key drivers for the positive impact. We had this repayment to San'an, but we also had a delta of EUR 8 million in advanced payments. This was a positive contribution whereas our running cost or running expenses went against it.

The third point about our cash flow is that we had a slow quarter on CapEx. We expect the full-year CapEx to end up on a similar level as the last year. However, the first quarter was a slower one. It's a result of our activities to hold back or to reduce cost in Q1 wherever we could and also the limits of spending on things which are not decisive for key milestones in our new projects. If you look at the cost and if you look at the CapEx, that is something which we tried to contain in the first quarter.

Q- Gerhard Orgonas - Exane BNP Paribas - Analyst

And the advance payments, is that just the normal course of business or was this exceptional if you relate it to the orders that you have received in Q1?

A-Martin Goetzeler

Let's take a look at the EUR44 million order intake. If you reduce EUR10 million for spares and service, you have EUR34 million. Particularly in compound we still have the situation that our customers pay around 30% in advance and that's covered through advanced payments.

Q- Gerhard Orgonas - Exane BNP Paribas - Analyst

Okay. Thank you.

Operator

Colin Rusch, Oppenheimer & Co

Q- Colin Rusch - Oppenheimer & Co. – Analyst

Can you talk a little bit about the graphene opportunity in more detail and how much visibility you have into demand for energy storage and advanced batteries?

A-Martin Goetzeler

Bernd is going to answer this question.

A- Dr. Bernd Schulte

Of course graphene and carbon nanotubes for battery and energy storage application are still at the beginning and really in the R&D stage. What I mentioned about the order from the Spanish customer is about different applications and you can assume that this is for high volume manufacturing. As you would know it's from the silicon field. It is at least an example about customers who are producing and selling products based on graphene and graphene layers made in our systems. But please be aware this is still in the beginning phase of the application.

A-Martin Goetzeler

Maybe one sentence from my side. We often mention this topic and this is important for us. We have today about 90 customers in this area and you know that these are smaller ticket-priced tools. So, we have really a solid foundation. Also ideas are coming to us, as Bernd said; there are several applications that have different requirements. It is not a major contributor to our R&D cost because partially it's supported by government funding. However, at the point when we see the opportunity, we definitely will start to invest in this area much more. The key for that is the close customer link to these 90 customers, that's what I wanted to add to Bernd's comments.

Q- Colin Rusch - Oppenheimer & Co. – Analyst

That was actually answering my follow-up question; I wanted to understand how many customers you had. And then with the working relationships; I mean obviously those are a lot of R&D centers, universities, things like that; how many new applications are they bringing and how does that pipeline look to you right now and when do you think that might turn into something meaningful in terms of a growth driver and an application for the topline for the Company?

A-Martin Goetzeler

We will answer this question quarter-by-quarter, but it's currently still difficult to predict. What we see now is good momentum of investing into R&D for our growing new technologies. End users now are also seeing the opportunity. Just think about the storage capacity of a Li-Ion-Battery - we see that it could go up by a factor of 5 to 10. That's a significant increase. So, there is a need to change. The question is at the end and that's always difficult for us to predict when the customer will switch to mass production.

The good news is I think a customer like Graphenea in Spain, whom we mentioned also in our press release, they are now buying more tools. So, they start to see growing demand from their side. But if we look at all these different applications, it's really difficult to predict.

Nevertheless, it's something we are tracking and we would like to look into the ecosystem and what we need to do in order to be successful going forward.

Q- Colin Rusch - Oppenheimer & Co. – Analyst

Okay. And one final one from me. How much reduction in working capital do you think you can get out of the balance sheet right now? You did collect on a bunch of receivables here and so help me understand how much more cash you could generate from the balance sheet just out of managing that a little bit more aggressively?

A-Martin Goetzeler

If you look at the balance sheet, the key item we have to focus is the inventory. Today we have EUR74 million in inventories. We also published information about how much is related to our AIX R6 in the report so that's information you can get from the balance sheet. My goal would be a turnover of 4 times so to turnaround our inventory 4 times a year as the first step. I hope that at a certain point we have a more stable business and not these huge jumps from one quarter to the other. Then this turnover will be possible. That's about our goal. After the first step we have to see if we can move further. To keep our advance payment level is something which we want to continue as well. If you look at the receivables, it's mostly related to spares and service and a little bit to final ATPs. So it's not a significant portion which is related to our outstanding sales. I want to add that there's not a lot of payments overdue as well. So, we really control this tightly. The focus is to keep our terms of advance payments and get in the first step to a turnover of 4 times for the inventory.

Q- Colin Rusch - Oppenheimer & Co. – Analyst

Thanks so much, guys.

Operator

Sandeep Deshpande, JPMorgan.

Q- Sandeep Deshpande - JPMorgan Cazenove - Analyst

Firstly on the III-V on silicon, did you say that you expect to see that ramping into production at some point in 2017 and so is it your view at this point that this is going to be a 7nm technology? And associated with that, how do you see the size of this market for AIXTRON as such really? Thanks.

A-Martin Goetzler

Bernd will give you our view of it.

A- Dr. Bernd Schulte

I think it cannot be expected that we see a ramp of this production technology in 2017. Even if you think it would be 7nm, it would be somewhat later. And it is not fully announced and clear to us when the semiconductor industry is deciding to make use of III-V materials in future generation of chips like 7nm or 5nm et cetera. So, that market size depending on the timing is significant to us. We do not give exact numbers, but it could be a significant size market.

Q- Sandeep Deshpande - JPMorgan Cazenove - Analyst

And just following up on that, can you talk about what you are doing at this point in the ALD side with the memory customers that you've had in the past? Is there a possibility of that business growing in the one to two year term? Thank you.

A- Dr. Bernd Schulte

We have one major memory customer who has qualified our ALD solution for DRAM application and we're working with two other memory customers on similar applications and a totally different one. For both these customers we're expecting qualification within this year, meaning that we are able to count that revenue this year. Moreover, it's important to bring at least one of the two into volume orders within end of this year or beginning next year. The other one will, by the nature of the application, take a bit longer.

Q- Sandeep Deshpande - JPMorgan Cazenove - Analyst

So, is there a potential size you see because you're not in general purpose ALD or in the specialized part of this market? Are you giving any indication of how you size this market for your sale?

A- Fr. Bernd Schulte

Certainly we have dedicated our product within basically two different technology solutions. One is the single wafer solution, which is mainly used in the logic area and the batch furnace solution and we positioned our tool in between. So our tool is capable of achieving similar performance in the single wafer tool solutions, but having a throughput higher than these. And everywhere you basically require this combination of high performance with an acceptable throughput for an ALD process, that's exactly where we position our tool. The sweet spot is indeed the memory area and that is where we're trying to gather new accounts for existing films as well as existing accounts with new films.

Q- Sandeep Deshpande - JPMorgan Cazenove - Analyst

Thank you.

Operator

Tammy Qiu, Berenberg Bank.

Q- Tammy Qiu - Berenberg Bank - Analyst

The first one is the LED equipment market has been fairly weak and I know you mentioned about the second half of 2016 will be a better half versus first half. Just wondering what visibility you have in the second half recovery and also how we should look at this market from a market competitive perspective in 2017 and 2018 potentially and what can be the main drivers for the demand? And my second question is for the OLED tools, can you talk about competition and also what's the rough gross margin there for the OLED tool compared to the old MOCVD tool? Thanks.

A-Martin Goetzeler

First on LED, as you know, for a couple of years we have been using our market model which particularly on the LED lighting side is working very well and confirming the end demand which is needed in the marketplace. What we hear from our customers is that there was a pickup over the last couple of months. However, the visibility is still not there especially if it goes beyond summer of this year. Nevertheless the demand coming from the LED lighting market is continuing to grow. As we mentioned, the 35% over the last couple of years will also continue. So why do we expect that there will be additional demand? First of all, I think we have been really at a historical low in the last three quarters or let's say at least two-and-a-half quarters and therefore there should be a turnaround.

Secondly, we also expect that a couple of strategic investments will be initiated. It might be also supported by some government funding contracts in certain regions. So it is driven by overall market growth of lighting and opportunities coming from the

strategic side. And last but not least, the new tools offer additional efficiency and productivity which would support replacement. Nevertheless we have to track that very closely. We said there will be a slight increase and we have to see how that materializes at the end.

Your second question on OLED. It is our goal here to achieve the margin of 30% to 35%. That's our overall company target. Since these are large orders where you cover major key components at a large scale, it also has a different price point. We think this is an area which we can achieve and we will achieve. The competition today in this area is another technology which is called VTE, Vacuum Thermal Evaporation, coming from primarily two Japanese competitors. We will have to demonstrate our material efficiency, our throughput, and at the end also our yield to be better than our competition. And that's exactly what we are doing right now. Demonstrating these advantages will be the key differentiators in order to make our technology successful.

Q- Tammy Qiu - Berenberg Bank - Analyst

Third question, how should we look at 2017 and 2018? Is that still going to be regulation driven or is that going to be demand driven?

A-Martin Goetzeler

For LEDs?

Q- Tammy Qiu - Berenberg Bank - Analyst

Yes, for LED equipment?

A-Martin Goetzeler

I would say it's both. It will be a mix.

Q- Tammy Qiu - Berenberg Bank - Analyst

Okay. Thanks.

Operator

Andrew Humphrey, Morgan Stanley.

Q- Andrew Humphrey - Morgan Stanley - Analyst

You've given reasonably granular guidance for 2016 on cash. But I just wonder if you could give us a bit more on how you see that progressing through the year, whether you're taking any particular cash saving measures, and I guess kind of what level of liquidity buffer you're comfortable with? Thanks.

A-Martin Goetzeler

Thank you for this question and I often get this question. About the second part, where do I feel comfortable with the cash level? There's a cash level which I clearly have in mind we will not surpass to the south. But I will not disclose that in this call. What do we do in order to improve our cash position? We still have some AIX R6 tools on our balance sheet, which we're going to continue to sell. Secondly, we will continue to focus very much on advanced payments for all incoming orders. And thirdly, we have to remain focused on CapEx and OpEx. So, there are several activities in order to keep our cash together. As we described, the guidance also depends on the volume level we can achieve at the end of the year. If we can be at the high end, as I said, there will be also a slight improvement in terms of earning and free cash flow.

Q- Andrew Humphrey - Morgan Stanley - Analyst

That's great. Thank you.

Operator

Uwe Schupp, Deutsche Bank.

Q- Uwe Schupp - Deutsche Bank - Analyst

First on LED and second on telecom-datacom. Just in terms of the big CapEx program firstly on the LED side of your former employer (Osram), Martin, I will not be asking you about the share of the pie that you expect to be getting, but certainly any indication on the internal planning that you expect to get in terms of timing would be certainly welcome.

And secondly, just in terms of the telecom-datacom demand, you indicated that you had a strong Q1 on the back of that but further trends would be difficult to quantify. I actually do remember it was in the last boom in 2000, 2001, long time ago when it was half your business at some stage. Do you see that this demand today is really replacement demand i.e. it will probably take a few quarters more before this is ultimately done or is this really outright new tools where simply new application require new and highly efficient machines? Thank you.

A-Martin Goetzeler

The second question Bernd will have an answer. His history actually goes even further back than 2001. And I ask for your understanding that we don't comment on our customers' plans and actually they can also change so we will not be able to comment on this today. So, we would focus on your second question.

A- Dr. Bernd Schulte

On the datacom, of course, there is a variety of applications and it is not such dense market coverage like for LEDs. What we see is that it's not like a replacement market for old tools. It is indeed driven by new applications of laser devices and you will see in the future lasers used in gadgets such as laser devices being used in cellphones et cetera. And all those things besides, the increasing demand for data communication is driving new demand.

Q- Uwe Schupp - Deutsche Bank - Analyst

And as far as you can tell from today's perspective, it will at least continue in the current quarter and potentially some part into the second half?

A- Dr. Bernd Schulte

I would say it will continue short term, but on medium term, as always, our visibility is limited.

Q- Uwe Schupp - Deutsche Bank - Analyst

Thank you. Very helpful.

Operator

Janardan Menon, Liberum.

Q- Janardan Menon - Liberum Capital - Analyst

My first question is actually again on the LED side. Last year LED was about 26% of your revenue and this year in the first quarter it's about 15%. When you say that it's going to pick up in the second half, are you saying that from the very low run rates of Q1 in the first half it will pick up or do you expect LED to be bigger in absolute terms of your total EUR170 million to EUR200 million of revenue this year than it was last year? And then I have a follow-up.

A-Martin Goetzeler

When we talk about picking up, we always refer to absolute numbers. That's what we expect for the remainder of the year. Secondly, when we talk about LED, there are two applications. One is for blue and white, which is based on gallium nitride; and I also mentioned some good order intake for red-orange-yellow, where you need gallium arsenide tools and there we currently have a good momentum. For both applications, we would expect some increase over the remainder of the year. As I mentioned, we'll see more pickup in general of the market. That's something which we have to see over the next couple of months and we have planned for that. In general, the increase we will see in any case is due to the order intake on red-

orange-yellow. We also expect to see some demand increase of the gallium nitride tools.

Q- Janardan Menon - Liberum Capital - Analyst

Okay. And in the power semiconductor side, how much of this is for R&D still? Is it mainly for commercial use? And on the commercial side, what are some of the applications which are driving growth here now for GaN in semiconductors? You mentioned electro mobility a few times, can you elaborate on that? Is that for batteries, for electric cars, or what are we talking about there?

A- Dr. Bernd Schulte

This is basically in all areas where you convert energy from high to low or low to high voltage and it's in all kinds of electrical applications. We're talking about an existing market, which today is served by silicon-based semiconductor devices. It's a very big market and we're talking about a penetration of new materials like gallium nitride and silicon carbide replacing existing silicon devices. It goes in the first place where these new materials find sweet spots. These sweet spots are that you can run the same voltage or the same energy converting on much smaller device sizes, which applies to every mobile application.

Secondly, you can drive these semiconductors at much higher frequency than the silicon semiconductors, which gives, for example, charging et cetera higher speeds. I'm sure you would see it very soon, for example, very simple chargers for mobile devices like cell phones using gallium nitride based power devices which enable you to recharge your phone in half or even a third of the time than is required today. The big demand comes when the devices really convert in the 600 volt range. There is more in the industrial applications in future for charging electrical vehicles and many, many other applications. I would say a medium-term application opportunity. That's where the big business is.

Q- Janardan Menon - Liberum Capital - Analyst

So are you now seeing sort of a steady growth or is there a prospect of a significant acceleration within a medium term say within the next one year or so?

A- Dr. Bernd Schulte

No, I don't expect an immediate acceleration. This is not a so-to-say gadget market, which has the nature of an explosion. This is an existing but very conservative market, where we have been in the phase that our customers have been working on developing those devices for the last three to five years. Nowadays, we are in the phase of seeing repeat orders on low levels. This means, our customers are now at the stage where they are testing repeatability of their production technologies and are sampling to their customers in higher volumes, which requires that they have backup equipment to cover this development.

So, all of these things are moving on. But we have to be clear here for this year and potentially next year, it is built on a relatively low level demand. But – we are also

seeing quite a number of newcomers in this field with new ideas starting all over in this area.

Power electronics is definitely a growing potential for our technology, that's given.

A-Martin Goetzeler

We have about 45 customers in power electronics. The momentum of this market will depend on how many at the same time start to move into mass production. Even if it's not the large, bulk orders we have seen in LEDs, it could fuel momentum as a whole. The exact timing for us is difficult to predict. But you saw the improvement last year. This is what we want to build on in order to further improve upwards. The opportunity is significant.

Q- Janardan Menon - Liberum Capital - Analyst

But right now, almost none of them will be in mass production now?

A-Martin Goetzeler

We have, as Bernd said, a couple of customers who placed repeat orders. If they place repeat orders, we would consider them moving into volume production.

Q- Janardan Menon - Liberum Capital - Analyst

Okay. Thank you.

Operator

Gunther Hollfelder, Baader Bank.

Q- Gunther Hollfelder - Baader-Helvea Equity Research - Analyst

I have a follow-up on power semiconductors. Can you tell us what's the share of SiC related tools within power semiconductor?

A-Martin Goetzeler

You mean of the market or of ours?

Q- Gunther Hollfelder - Baader-Helvea Equity Research - Analyst

For example what you're expecting this year in terms of power semiconductor related sales so just approximately what could be silicon carbide related I think like your ot-wall systems. Is this a very small amount today or do you already see momentum also on the silicon carbide side?

A- Dr. Bernd Schulte

Silicon carbide within the power electronics applications is on the high end because it's really for switching very high voltages. Therefore, this is probably more a longer-term application compared to gallium nitride. When you want to switch power voltages beyond 1,000 volt or 1,200 volt, then typically customers are using silicon carbide. As such, we expect the silicon carbide related business for us in terms of revenue potential being in the smaller range compared to gallium nitride.

A-Martin Goetzeler

Maybe we can share with you a number. About one-third last year was silicon carbide.

Q- Gunther Hollfelder - Baader-Helvea Equity Research - Analyst

And if I look at the guys that have strong momentum in silicon carbide like Cree-Wolfspeed or Rohm, this is probably a captive business or --?

A- Dr. Bernd Schulte

They could be our customers.

Q- Gunther Hollfelder - Baader-Helvea Equity Research - Analyst

Okay. And another question just on the guidance for the order intake. You were mentioning the OVPD timing in terms of orders. So could this have a significant impact on your guidance for the order intake then for 2016 if there would be orders during the summer this year?

A-Martin Goetzeler

We expect that the first steps we will make at these large customers would be with some qualification technologies within their R&D activity. So, that will be step-by-step. The most important bulk orders we then expect maybe a little bit later. From our perspective, for this year it will have an impact, but it will not yet be an order as you might expect for a production grade Gen 8 or Gen 10 tool.

A- Dr. Bernd Schulte

When we give guidance on revenues, we can clearly say we do not expect those orders to become revenue this year.

Q- Gunther Hollfelder - Baader-Helvea Equity Research - Analyst

Maybe a last one on solar, you had a strong solar business in 2015. In 2016 are you seeing any related business related to solar in 2016 right now?

A- Dr. Bernd Schulte

I would say in 2015 it was a specific customer with a specific application. We do not expect to have the same levels in the solar area in 2016. However we still expect on a lower level business from that application, even also from other customers.

Q- Gunther Hollfelder - Baader-Helvia Equity Research - Analyst

Great. Many thanks.

Operator

Harald Schnitzer, DZ Bank.

Q- Harald Schnitzer - DZ Bank - Analyst

I've got a quick question on the order intake as well. So you've given guidance for revenues, but you gave guidance for the order intake for fiscal year 2016 as well. And I wonder, despite kind of bright prospects that you just expect stagnation of the order intake. Is it then a question of price quality? And secondly on the EBITDA guidance for 2017, at what revenue would you be able to reach this point and when do you expect to be profitable on the EBIT side? Thank you.

A-Martin Goetzeler

Going first to your second question. When we achieved a positive EBITDA in the second half of last year, we also achieved almost breakeven in EBIT. That's also confirming our structure and our business model, where we always said we would like to achieve levels of around EUR 80 million OpEx. With 30% to 35% gross margin, we can achieve a positive or breakeven EBIT at around EUR250 million of revenues. It could also be a little bit lower in terms of sales in order to achieve a positive EBITDA. That's for the second question.

The first question was on order intake. We have to see how it develops as Bernd said. It's always for us to have good visibility with all our leads until June, maybe even July. Then it's getting already difficult to predict. There might be an opportunity on the other side. If there is an opportunity, it would increasingly support 2017 and not so much 2016 anymore.

Q- Harald Schnitzer - DZ Bank - Analyst

Thank you.

Operator

Johannes Ries, Apus

Q- Johannes Ries, Apus

Maybe only for clarification. You mentioned silicon may even be able to turn into revenues when orders are coming in November. Is it right to expect that here the second half could be much stronger given what other semi equipment companies have said memory could be better in the second half. Therefore there could be some uptick in this business during the year? First question.

A-Martin Goetzeler

That's also our expectation that during the remainder of the year the silicon business will increase. As Bernd already said, it's related to orders coming in and the qualifications of some of our existing customers.

Q- Johannes Ries, Apus

Second question. Gallium nitride on silicon, do you expect other customers like Plessey to place orders or are you in other discussions that even large companies looking at this technology maybe even moving back in this business. How do you see development at the moment at some of the leading companies on the high end maybe moving in? Could others follow on this given the advantages of this technology?

A-Martin Goetzeler

Bernd will give you some remarks on this one.

A- Dr. Bernd Schulte

Today, there are basically two customers who are focusing on gallium nitride on silicon for LED; I guess that is what you meant for LED application.

So far we're seeing these two players which I think we can name. It's Samsung and Plessey. It's public that they are focusing on these applications. There are other customers in China who also are dealing with this technology while we cannot comment whether the Tier 1 players are having programs to develop their technology on silicon. It's difficult to comment from our side. But in principle, it is not just the silicon substrate which gives significant advantages. It is the silicon-based backend processes, which are very established from the silicon technology, and that gives the big opportunity in cost saving.

In order to have the real cost saving, you need to have an extremely good yield and uniformity on the wafer to allow and enable so-called wafer level packaging, meaning you can run through your backend and using most of the processes on the entire wafer, not on single little chips. That is a big cost saving.

Q- Johannes Ries, Apus

Okay. Maybe a topic which was not discussed so far this afternoon. There have been heavy rumors maybe on bits on AIXTRON and maybe a more general question, how big you may be or how unsecure you feel that maybe given the low valuation and all the future technologies you're heavily invested in that maybe such things could happen?

A-Martin Goetzeler

As a listed company we cannot comment on any of these kind of speculations and rumors and we will not do.

Q- Johannes Ries, Apus

Okay.

Guido Pickert

Thank you, operator, and thanks everyone for your interest and participation in today's call. If you have further questions, please don't hesitate to contact either my colleague Andrea Su in the US or myself here in Germany. We'll be happy to answer your questions if possible. This concludes today's call. Good bye to everyone and thank you.