Video Interview ASML CEO Peter Wennink – Results Q4 & FY 2018 23 January 2019

ASML showed a good fourth quarter. What are the highlights?

The quarter was good. We had sales that exceeded our expectations, or at least our guidance. That was because we pulled some systems in from Q1 to Q4, which led to a EUR 3.1 billion sales number. Gross margin was good, 48.5 percent.

However, a few days before the results we reached an initial settlement with Nikon on a year-long IP infringement court case and we settled with them. We provided EUR 130 million of cost. Which actually brings down the gross margin, we charge this to the gross margin, brings it down to 44.3 percent.

Now if we look at that, net income for the quarter EUR 900 million and if we take into account the Nikon settlement, EUR 788 million.

Anyhow, you report another record year. How would you summarize 2018?

I think 2018 is a very good year. I mean in 2018 we reached almost our EUR 11 billion target that we set for 2020, which is very good. That actually means that net income was EUR 2.7 billion.

However, because of the Nikon settlement we had to take a provision for EUR 130 million, that brings the net income to EUR 2.6 billion. Gross margin 47 percent.

With the Nikon settlement that goes down to 46 percent. But all in all, if you look at this from a financial point of view, very good.

Now having said that, the biggest achievement is not on the financial ones. The biggest achievements in 2018 were the technological breakthroughs that we had in EUV, DUV business, application business. So, we are very well positioned for further growth in the next couple of years.

Let's have look at EUV. How are you progressing with EUV?

When you think about EUV in 2018, I can tell you anything about technological progress, which I will do, but really the most important here is that it's the acknowledgement of the customers that EUV is there to be used in high volume production. All our major customers are planning EUV in high volume production. They are very vocal about this. I mean in their public statements on the next generation they talk about EUV, whether it's for n7+, n5, L7 - it's EUV. Why is that? It is actually evidenced by the fact that when we look at our order book it contains more systems, more unit systems, than our planned shipments for 2019. So that is very good. Why is that? It is really because we made some technological breakthroughs. We actually are over 250Watt power in our current systems. It brings us over 145 wafers per hour, where we initially planned 125. We pulled the development of the NXE:3400C in, which gives more transparency and more wafers per hour, over 170 wafers per hour. If you take that all together, that explains the confidence of the customers to say: EUV will happen and we are going to put this into high volume production.

Are there already gadgets that have chips made on EUV systems?

You will see the first high-end applications being built with devices and chips that will be made on our EUV systems in the second half of this year.

Let's have a look at the semiconductor markets. There is considerable uncertainty in the market. What's your take on the semiconductor market at present?

It's undeniable that we have a concern, a certain weakness in the market right now. I think it is primarily driven by the fact that we see certain patches of the economy cooling. China for instance. We have geopolitical tensions, the fear of trade war. We have local fears like the Brexit and everything together leads to a slowing demand for end products, which also reflects on semiconductors. That's what we have seen. I think we have seen that trend developing in the second half of 2018. But at ASML, close to year end, we saw customers coming, both Memory and Logic customers that actually said that the market is clearly showing signs of slowing and some weakness. They decided to push out some of the H1 - the first half of 2019 shipments – into the second half. That's both for Memory and for Logic customers. That has happened. If we look at that and we would split that into the business segments: NAND - there is some overcapacity, that is not a surprise. That was already there also last guarter. We saw the 2D to 3D transition has happened. Yield improvements are clear. A lot of investments were done over the last two years. So, digestion period that is clear. DRAM: we very clearly see a slower end demand for bits. That has to do with for instance the mobile market is slowing because of the economic situation. We see a slower uptick in the server market. So, that is where DRAM end demand seems to slow. Which will not only happen now, but I think it will continue in Q1 and Q2.

On Logic, Logic is also a victim of some slowdown in the mobile phone space. But if you really look at Logic from our point of view, there is quite a significant growth profile in 2019 for Logic and that is also mentioned by our customers. There is a very strong demand for the next generation chips. So, for the n7+ chips, n5, for n10, and that all needs EUV also and a lot of Immersion. So, from a Logic point of view, the market is strong for us.

Now I'd like to summarize 2019 as follows. If you look at the business segments, I think Memory, 2019 as compared to 2018 will probably just be over 20 percent lower than in 2018. For Logic however, I think Logic for 2019 as compared to 2018, we see around a 50 percent increase for the demand for our systems. Installed base management is going to be single digit, also because you see a slowdown in the industry. So, some of the upgrades that we are currently planning will probably be a little bit later. All in all, if you add all that up and you compare 2018 and 2019, we see growth - 2019 is going to be a growth year.

Regarding 2019, can you give a sense of the impact of the fire at one of your suppliers – Prodrive – in December last year?

Yes, that happened in December last year, very unfortunate. At that fire the work in process and part of the inventory were actually gone. Now that cycle time to start up that production, it was a work in process, and to get to output is about a quarter. So, this is why we see about a quarter delay. It's about EUR 300 million of impact that we see in the first quarter, which we will recuperate largely in Q2. But that is what it is.

How does this translate into ASML's sales first quarter, but also for the full year? The full year is going to be very good, really driven by strong Logic demand. The first quarter will be light and it will be light because – like I just mentioned – we have about EUR 300 million of impact of the fire at one of our suppliers. Which actually pushes some of those shipments into Q2. One of the reasons for the lightness in Q1 is the pull-in that we saw in Q4 of 2018 of some of the systems that we planned for Q1 and the push-outs that are starting to push to the second half of 2019. Looking at that and looking at the first half, those trends that I just mentioned for Q1, they will also be visible in Q2. But we see a very strong correction and uptick in the second half of 2019. So, it is going to be a year that is really skewed towards the second half. If you would compare the first half of 2019 with the second half of 2018 – it will be a lower sales number. That reduction in sales is evenly split between Memory and Logic.

Has this also to do with the fact that you report a lower guidance for gross margin?

The gross margin is a reflection of the light sales number. Specifically there are three reasons. One, of course lower sales. With this supplier accident that has actually happened we have to push some of the higher-margin systems to Q2 and beyond. Upgrades, we'd like to use the components to build new systems and we push upgrades to the second half of the year. Those are high-margin products that we planned for Q1, which of course are now pushed back. Next to that of course lower sales means lower load in the factory. So, the factory utilization is going down. A third very important item is that we have invested very strongly in our service infrastructure. Our customers will ramp high volume EUV towards the end of the year, in the second half of this year. That means that the service infrastructure is there and it's a big number. With very low sales you have a bigger relative impact of that service business - that is not profitable yet - on the gross margin of the first guarter. We'll see that also in the second quarter. But it will recuperate in the second half. In the second half you'll see a strong improvement of the gross margin because of higher sales, better load, the introduction of high-margin EUV systems, we'll see upgrades coming back because we will then have all the components to do the upgrades. I think if you add that all together, you will see a gradual improvement of our gross margin from the low levels in Q1 to the end of the year. I strongly believe that we will exit the year with gross margins which are growing towards the gross margin target of 50 percent in 2020.

Summarizing your story, it all has to do with temporary business conditions.

I've been with the business more than twenty years and I stopped saying this business is not cyclical. I stopped saying that a long time ago. It will always be cyclical. If you look at the very strong capacity additions that we've had over the last couple of years, driven by very strong end demand for leading-edge products. But it is logical that at a certain moment in time when the economic tailwind is suddenly a headwind, that will be a time that we need to do a digestion. That's happening as we speak. That's normal, we've had that before. But you need to really think about what does that mean for the medium to long term future of the company. It is very bright. There is no doubt – and when you listen to our customers – what the benefits are of the next generation chips. Those will be significant. So, we will keep investing even in times of slowdown - we have done this in the past and we'll do it again. We will invest in R&D or even accelerate. We need to pull EUV in. We want to make sure that those high-value products for customers and for us, will be available in 2020 and beyond. So, we are going to increase our R&D from EUR 1.6 billion last year to about EUR 1.9 billion this year. It is all driven by the fact that we strongly believe in what we have said at our

Capital Markets Day about the prospect and the future of this company. If you look at that and you translate that into our confidence, we translate that confidence into increase our dividend with 50 percent and that, all in all, is a very good thing.