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Introduction

Ulla Paajanen

Head of Investor Relations

Welcome

Aren't those pictures nice? This is what you can do in bioeconomy. Good morning everyone, I'm Ulla Paajanen and Head of Investor Relations here at Stora Enso, and warm welcome to everybody here in the room – it's a great crowd – and also our guests there in the webcast. We are going to have seven presentations today telling us how to create value in the bioeconomy. We will be presenting all our divisions today. And when you came into the room, I saw that many of you were really busy familiarizing yourselves with our demo stations. In the feedback, we always get that they are very popular, and I can see why.

Demo Stations

The demo stations this year, you can visit forests here in Helsinki through our virtual forest app. Then we also have world's biggest demo station, Wood City. That is just outside, if you look out of the window, across the street. We will familiarize more of that during the drinks reception tonight, when we can see the whole building. This morning we also launch ECO RFID tag and that was on the demo stations; that's part of packaging solutions. And tomorrow many of you will join us to a site visit to Heinola and Lahti, and you can see what packaging solutions do on the sites.

Safety

Before diving in today's agenda, I want to say couple of words about safety. Safety is very important for Stora Enso. In case of emergency, you can see these two stores here – doors here that you need to take. Step outside and you can take either right or left and you find stairs that will take you to the ground floor, and then there are assembly stations in both ends of this hotel where we would like you to go in the very unexpected event of emergency.

And before – and now we start the day, the diving into bioeconomy. And I want to invite the first speaker to the stage and he's our CEO, Karl-Henrik Sundström. Karl, please.

Creating Value in the Bioeconomy

Karl-Henrik Sundström

Chief Executive Officer

Introduction

Thank you, Ulla. And it is a pleasure to have you here this morning, and this is a bit complicated area to actually have a speech because I have a pillar [in front of me], so I will go with my head [like this] and I can't move too much. But, anyway, very welcome here to Helsinki. I'm very pleased to actually be in Helsinki, and especially having this Wood City on the side. And I think you will see some of the potential in our product portfolio today.

We Are Perfectly Positioned to Benefit from the Megatrends...

So we are, Stora Enso, in a very good position right now because every company, every individual are facing a number of megatrends today; either you like them or you don't like them. In the center of all this is obviously the global warming, but working with a raw material that is renewable, reusable and fossil free gives us a unique opportunity and we are going to capitalize on that unique possibility.

...as the Renewable Materials Company

So the promise that we are making to you and to everybody else is all about that everything that is today made out of fossil-based material, tomorrow can be made out of the wood fiber. And that is very important to remind, because that gives us a unique possibility to become the renewable materials company, and I think that is an aspiration that we are driving for.

Our Transformation Strategy Continues...

Going to the strategy, the strategy remains the same as it has been doing for the last couple of years. We are just fine-tuning it a little bit, but it is the same, and I think that's a strength. We have been working on this strategy for the last couple of years. It's about customer insight, innovation, structured processes, as – obviously, as well as motivated employees. The important part here, just to spell out the importance of structured processes, is either how we drive processes within the company – because in the digital economy the marginal cost is zero and the more you can structure intercommon processes and digitalize, the better leverage you've got. The other one is other type of processes, like how we allocate capital, which Seppo will talk about later on, which, I think, for you is very important that we have a stringent, long-term strategy for how to allocate capital between the sites.

...Delivering Sustainable Profitable Growth

The other part of this coin is actually how we are delivering sustainable profitability, and when we talk about sustainable profitable growth it has to be sustainable in all dimensions; it's for the shareholders, it's for the suppliers, it's for the employees, it's for our various partners, it's for our customers and society as a whole.

In our model we are working with four cornerstones. Obviously, we do strategic investments and we put our bets into areas where we think is growth. That's one cornerstone and we have done that successful over the past year. The other one is to have a very rigid model where we allocate CAPEX in accordance with our hurdle rates for the five divisions, and Seppo will come back to that later on. Then, obviously, is to have a competitive dividend payout, and we have, over a longer period, increased it by over 9% per year, and in the shorter period, 11%. And then, obviously, it's important for us to have a very strong balance sheet, and we have tightened the target. We used to have below three times net debt to EBITDA and we are now at the level of the target level below two. And in the third quarter of 2018 we were down to 1.1 times, so we are getting a stronger balance sheet, so things are working in our favor.

We Are Well-positioned for Profitable Growth – Strength of Our Portfolio

We are investing more in innovation and R&D...

We also have a very important, and competitive, and almost unique, product portfolio. And I will not go into this slide very much because this will be presented by Annica, Markus, Gilles, Kati and Jari; you will get all the ins/outs of the strength of our unique product portfolio. But

one thing that we are very proud of is that we are spending, basically, twice as much as our nearest competitor in R&D and in innovation. This is an important part for us because this means that we will be perceived as an innovative partner with our customers, but also driving superior margins.

...And that is accelerating our profitable growth

We have been working with this for a couple of years and we measure a new product being new in two perspective. It has to be new in the face of the customer and it cannot be older than three years. When we started to measure this in 2015 it was 1.5; in 2016 it was 3.6%; in 2017 we reached 8% and – 7% – and right now we are somewhere around 9%. The target is to take this to 15%. That means that we will renew our product portfolio, in average, every ten years. It gives us a time monopoly with the customers, which means that we are first, and we have a longer time to discuss the new solution, and secondly, it also gives you better margin because all product you develop have a better margin than the old one.

We See Many New Opportunities to Replace Fossil-based Materials...

I, now, would like to go into a little bit deeper three of the new platforms that we are developing and talk a little bit of the potential. They will also come up in the presentations in the respective division.

Lignin-based products

Developing a platform in this industry takes, like any industry, about ten to 15 years, so we are focusing right now, among many things, on these three platforms. One is the lignin-based products that we have start to ship. In the first phase, we are basically using the lignin-based product to replace phenol in glue, and we've already been testing that in our LVL mill in Varkaus. The second part here is actually to produce carbon fiber, and the third area we are focusing on, and that is a good demonstration outside, is actually hard carbon for energy storage or, in layman's words, batteries.

Biocomposites

The other area is biocomposites. Biocomposites is a very efficient way of replacing up to 50% or 60% fossil-based materials today to produce granules. These granules can be used in all the existing blow-molding equipment there is. So in a very short period you can actually place up to 60% in the first generation of these granules fossil-based materials, and here we are getting a great tension. Has huge market potential and very attractive margins, and we have, probably, the biggest equipment in the world in Hylte, that was inaugurated this summer, and we are now ramping up.

Liquid packaging MFC

The third new platform is MFC. MFC we've been working for four years. In 2015 we'd introduced it as a source reduction in liquid board for certain markets, and now, as you're probably aware of, in the third quarter announcement we also announced that we are rebuilding one machine in Imatra to be able to produce the first generation of MFC film. Annica will come back to this.

But these three platforms are going to be very important in the next five to ten years and we are working hard on it, and we think we are in a very strong lead here.

...Iceland Foods Chooses Trayforma to Replace Plastics

As you're well aware of today, many of the leading retailers and brand owners are actively seeking to replace plastic, and they supported by the legislation, that will probably come out during next year, about the ban of single-use plastic. We have a very good example of one of the biggest specialized retailers in the UK market, Iceland, for frozen food. They have decided to go faster than the market, and get the competitive advantage in the market, by replacing plastic materials by 2023. And they have chosen, as a platform, our Trayforma; this a very, very strong message.

So this is happening and you will see more and more brand owners during the presentation today announcing that they are going to replace plastic, an enormous opportunity for us.

Digitalization Gives Us a Competitive Advantage

The other area that we are combining with innovation is digitalization. Digitalization offers unique possibilities to actually drive a number of areas. So we are focusing our digitalization efforts in three areas.

Customer engagement

A new customer engagement; that is either new business models, and integrated supply chain and other things, which is very important, that actually makes it easier to do business with Stora Enso than your competitors.

Industrial digitalization

The third area is more traditional and that is about how we get industrial digitalization or getting more efficiency out of your machines and your supply chain. And the third area is all about getting an efficient back office. We've been working here in various streams: we have been working internally rebuilding competence; we've been working with a lot of start-ups; and we are very proud, actually, to be named the best – no, the most start-up friendly company in Finland, and I think that's recognized in that we've been working with this for a couple of years.

Smart back office

The other area, when it comes to bots or RPA, or robot process automation, we will have 33 processes in place by the end of the year, and Seppo will talk more about that.

We Control ~30% of Our Wood Raw Material – a Critical Advantage in the Bioeconomy*Stora Enso's forest assets*

Another area that I would like to highlight to you is the importance of controlling your wood supply in the bioeconomy. So we are having a control, either through ownerships or unique supplier agreements or about 30% of our wood supply. And, as you can see here, in Sweden it's up to 50%, in Finland it's lower, but that has to do with the different structure of the forest ownership in Finland. And in Brazil it's either about 80% through our own plantation, and the remaining is coming from certified wood farmers. Similar situation in Uruguay, and China we are long in wood, which means that we are selling in the open market, as well as having discussions with the authorities to give back some of the land because we do not need all the land.

Pulpwood plantation availability and wood cost

The other part is that, on the other side of the slide, you can see that it is important to understand that plantation areas are scarce in the world and there is a huge difference where you are on the wood prices, with a fundamental reason for making investment or not making investment when you look at pulp.

Oulu Mill Conversion Opportunity for Packaging*Potential reduction of Stora Enso paper capacity by 20%*

We have, and we are, under discussion and an internal feasibility study of the possibility of turning Oulu into a brown mill. This is an ongoing feasibility study which offer us opportunity once – to see if it's economically feasible to divide or convert Oulu into a full brown mill, producing kraftliner as well as CUK. However, this is not ready yet, so we will come back to you when we have information, but, as I would like to point out, the option is also to continue to produce papers.

Our Formula for Success Continues...

What is important for you, when we go through this presentation today, understand that we believe we can offer growth, excluding paper, to 4% to 6% annually. We will continue with the strong cash generation. We have CAPEX of around €3 billion, of which €1 to €1.2 is maintenance, and the rest is available for more strategic investments. We will continue with the dividend policy of 50% of EPS over a cycle and we have strength in our financial target of being below two times in net debt to EBITDA.

...Sustaining Dividend Growth...

Dividends we have increased since 2007, slightly more than 9%, and in the short[?] period from 2015 we have improved it by 11% per year, and this is a focus that we aim to continue. So with improved performance, as we believe is the possibility that we have in front of us, dividends will increase.

...and Investing Selectively in M&A to Sustain Profitable Growth

Another part is what is our M&A agenda? We are focusing, basically, on three areas for M&A: it's either to strengthen relative market share in an area that we find is interesting for us; or strengthen already existing strategies; or to acquire new process or products to be able to deliver according to our strategy. So if you take a couple of recent acquisitions. You can say Bergvik – restructuring of Bergvik is typically number two, while Cellutech and Virdia is where we are getting new products and technologies to be able to grow.

We Have Several Attractive Profitable Growth Options

We have several profitable growth alternatives, and the alternatives – and you will come back to that later in separate talks about the capital allocation – but looking upon the growth possibilities that we see, we have quite a lot of annual growth coming out of the various divisions, and this will be presented by my colleagues later on.

So to conclude this little presentation as an introduction I will say that we have a unique raw material. We have a very strong product portfolio which we can leverage of our innovation and digitalization agenda. With that, I hand over to Ulla.

Q&A

Ulla Paajanen: Okay. Thank you, Karl, for a very informative, good presentation. And now we are ready for Q&A. Please, okay, please.

Mikael Jåfs (Kepler Cheuvreux): Thank you. Mikael Jåfs, Kepler Cheuvreux. You mentioned there your three, sort of, focus areas, out of which lignin was one. Could you put some color and flavor on, sort of, what's the size in tons today, and going forward, for those three areas?

Karl-Henrik Sundström: So in the first phase now, we have a capacity of 50,000 tons, and, obviously, when we get more traction we will build it, because we can extract lignin with the technology that we have in Sunila in a lot more mills.

Mikael Jåfs: And the Hylte?

Karl-Henrik Sundström: And the Hylte is 15,000 tons in the equipment we've having now, but we have two old paper machine holes that we can fill with more machines, because we have ample capacity of TMP.

Mikael Jåfs: Thank you.

Ulla Paajanen: Okay, Gustaf.

Gustaf Schwerin (Pareto): Hi, this is Gustaf Schwerin from Pareto. A question on your CAPEX guidance that you came up with yesterday. Just to remind us, when you released the feasibility study for Oulu you said that you could do this under your earlier CAPEX guidance, which was something like in line with depreciation. So just thinking, if you were to decide to build this, how should we think about on CAPEX?

Karl-Henrik Sundström: It's within the guidance.

Gustaf Schwerin: So roughly how much is allocated for next year?

Karl-Henrik Sundström: Since we haven't taken any decision and the feasibility study is not ready yet, I cannot answer that.

Gustaf Schwerin: Okay, thank you.

Ulla Paajanen: Okay, good. Thanks. I think Lars was next and then Linus.

Lars Kjellberg (Credit Suisse): Lars Kjellberg, Credit Suisse. I just come back to the opportunities to replace fossil-based fuels. You mentioned market sizes here, you know, and of course your capacity today is relatively de minimis, so what are those market sizes based upon and when do you think that realized[?], because it's not current market I would assume?

Karl-Henrik Sundström: It is current market because what you can do with – the way we have calculated, for example, when it comes to biocomposites is basically old granules, excluding the ones that are see-through because we can't do see-through because the fiber will be visible.

Lars Kjellberg: Okay. So just to understand, so who supplies this today?

Karl-Henrik Sundström: It's basically the petrochemical industry.

Lars Kjellberg: Okay, thank you.

Ulla Paajanen: Okay. Linus next and then Antti.

Linus Larsson (SEB): Thank you very much. Linus Larsson with SEB. Just on – coming back to capital allocation and the previous question about CAPEX, the CAPEX guidance for next year, what's the unallocated portion of your guidance? And, second to that, when you talk about M&A and you get those three types of potential targets, could you say how much of a focus that actually is today for Stora Enso to look for acquisitive growth?

Karl-Henrik Sundström: So when it comes to what is allocated and not allocated, I will answer it very simply because we are right in the budgeting process. But I would say that €200 to €250 is usually maintenance CAPEX, so that's – and then the remaining we can use for more aggressive. And then you probably have some tail-ends or Gruvön[?] and some other stuff, but a big amount is not allocated.

And when it comes to M&A, we've been looking in various forms and so we are quite active in looking, but we haven't found anything that really fits us. And we were very pleased to be to do Cellutech, which is a new platform for growth because what that will do, if it works right, has a possibility to replace – you know, in all packages you usually foam made of fossil-based, now you can make it out of cellulose.

Linus Larsson: And that particular acquisition was within the tech –

Karl-Henrik Sundström: Yes.

Linus Larsson: – criteria –

Karl-Henrik Sundström: Yes.

Linus Larsson: – and is that, actually, where you're looking the most?

Karl-Henrik Sundström: Yes.

Linus Larsson: Okay, thank you.

Ulla Paajanen: Okay, thanks. And now Antti Koskivuori.

Antti Koskivuori (Danske Bank): Yes, thank you. Antti Koskivuori from Danske. Question about the wood sourcing. You showed a number, that 30% of the total sourcing is coming from own forestlands –

Karl-Henrik Sundström: Or controlled.

Antti Koskivuori: – or controlled, yes. Are you happy with that number or should we expect that, going forward – I think this will be more, kind of, a – even more of a topic going forward, so should we expect that number to increase, going forward, and what's your thought on...?

Karl-Henrik Sundström: Obviously, if you do the maths; I don't have the balance sheet to go and be 100%, right? I think you, over time, will see that we will work in various forms to get even more control, and that doesn't mean I have to own it because I have my limitation in my balance sheet. But it could be other ways; long-term contracts and things like that. But getting – making sure that you're having control and not being cornered in any position, because you need to think about having those sites working for another 100 years.

Antti Koskivuori: But you're not excluding, kind of, using CAPEX on that subject either?

Karl-Henrik Sundström: No, no. But, you know, given the amount that you need – so don't ever think that I'm going to be 100% on the margin or controlling in a different way.

Antti Koskivuori: Okay, thank you.

Ulla Paajanen: Okay. Kevin, please.

Kevin: Yeah. On the replacing of fossil-based materials, are you expecting that to be driven purely by a push from the environmental side or are you also directly cost-competitive across these different areas?

Karl-Henrik Sundström: So we have worked with this for a long, long time. We believe, if we can't offer cost competitive, nobody will pay a premium, so it has to be cost-competitive. So if you take granules, for example, they are very cost-competitive and they have one thing more. The pricing of wood, which is 50%, 60% in the first[?], is very stable compared to the oil price, which means that you can offer more stability in the price as well. So they have certain feature. Other thing is that you get higher yield in the molding equipment because it's wood fiber so the heat is not so high, 10% to 15%.

Kevin: Okay. And on your wood sourcing, like one strategy, as you say, is own more, have more long-term strategic relationships. Have you also changed the way you think about your inventories, etc., given the disruptions we saw over the last 12 months?

Karl-Henrik Sundström: So what we have done is that, during, you know, the very unusual Q1 and Q2, I would say that our wood sourcing strategy is actually being adjusted for that because we don't think this is a one-time effect, so we are building more flexibility into it.

Kevin: Okay, thank you.

Ulla Paajanen: Okay, thanks Kevin. I think Robin is next.

Robin Santavirta (Carnegie Investment Bank): It's Robin Santavirta, Carnegie. Now, you're two million tons net long in chemical pulp at the moment, and I guess you, possibly, could increase that to[?] another project with Veracel. What are you – so what are your plans for the next five years or even longer, to decrease that net long position or actually to increase it, and would Veracel actually have enough plantation to – for Veracel to project?

Karl-Henrik Sundström: So I am comfortable in the long position that we are having today. I'd rather invest more money on the new platforms which are mainly coming out of buying materials. I probably will be longer in pulp by decline in paper over time, so that's happening. And then, when we get to the Veracel 2, it's probably a discussion that we will have to do in the years 2021, 2022, so it's a bit early.

Robin Santavirta: Thanks.

Ulla Paajanen: Good, thank you. Do we have more questions for Karl? Of course, there's an opportunity – okay, good, Mark, please go ahead.

Markku Järvinen (Handelsbanken): Markku Järvinen, Handelsbanken. You have this potential major investment in Oulu, €700 million. What about the areas of lignin and biocomposites; are those areas where we should expect potential major investments, or is that, sort of, more incremental, smaller investments?

Karl-Henrik Sundström: It is more incremental, smaller investments, and you have to have a.... So we built the first LignoBoost in Sunila, and now we know, we know we can put it into other mills. So it's going to be an addition to an existing infrastructure, that's how you should look at – when it says[?] incremental.

Markku Järvinen: Okay, thank you.

Ulla Paajanen: Okay, thank you. There will be, of course, possibility for more questions during the breakout sessions that we will be hosting afternoon, after the presentations. So thank you, Karl.

Karl-Henrik Sundström: Thank you.

Ulla Paajanen: And now we will have Annica Bresky, from our Consumer Board division, telling about her solid platform for profitable growth in the bioeconomy. Annica, please.

Solid Platform for Profitable Growth in the Bioeconomy

Annica Bresky

EVP, Consumer Board Division

We Are Well-positioned in the Bioeconomy

Good morning ladies and gentlemen. I'm so happy to have the opportunity to tell you a few words about Consumer Board division. Now, we are well-positioned in the bioeconomy. Last year we delivered a record high turnover of €2.5 billion. We have been growing solidly this year on a 5.6% level, higher than our relative market, which is growing 2.5%.

And one area that I'm particularly proud of is the fact that we are commercializing new products, together with our customers and brand owners, at a higher rate this year compared to last year. This year we have 14% of our sales coming from new products, and this is a true testimony that our collaborations are really working. As Karl said, the long-term target is 15%, but in Consumer Board division we are more ambitious than that, and I will come back on that further on in my presentation.

Our Strategy Provides a Solid Platform...

Global leader in attractive end-use segments

Our strategy remains unchanged. We – it is based on three pillars. To be the global leader in attractive end-use segments: this means that we want to have strong market positions, which we do have in many of our focus areas; we have 36% of the virgin carton board market in Europe, 10% globally, we also have number one positions in many of our core products, such as liquid packaging board, the brown CUK and food service boards.

Customer-driven innovations based on renewable materials

The second pillar is about driving customer-based innovation based on renewable materials. This is at the core of our strategy and it means that, through our innovation center, our two research centers, we drive more than 40 joint collaboration projects with our partners, with startup companies, with our customers and brand owners throughout the value chain to create the products and the packaging of the future.

Competitive and well-positioned assets

And last but not least, to have competitive, strong assets which are well-positioned to deliver on the global demands of our customers and brand owners. We have two integrated mills in Imatra and Skoghall, which are pulp integrated, two specialized mills in Fors and Ingerois, and, of course, the state-of-the-art mill in Beihai. And here the focus is to drive operational excellence, and I will show you that we have, over the years, been able to constantly increase our deliveries. We drive lean manufacturing, and also a lot of our digitalization initiatives – we have over 30 of them – are linked to driving more efficient manufacturing processes.

...Delivering Sustainable Profitable Growth...

And we are delivering sustainable, profitable growth. Here, of course, it's a comparability issue between the start-up of Beihai and the years before, but, as you have seen, the last years we have been outgrowing the market. And you're well aware, of course, that Q2 and Q3 have been challenging for consumer board from a profitability point of view. Our margins have been pressured.

The reasons for that have been twofold. One is the construct structure of this industry. We have stable products which are less cyclical and 80% of our contracts are long year contracts, which means multiple year contract, one, two, three, perhaps even four year contracts where the volumes are decided before hand. Of course, this creates stability in the product portfolio or Stora Enso and it is an important parameter to keep in mind.

Temporary Profitability Headwinds Addressed Through Profit Improvement Actions

Right now, we are negotiating many of the contracts that are expiring and are up for price negotiations and when we do that, we will of course compensate for the cost escalation we have seen in pulp and in other raw materials in the latest two quarters. The other reason has to do with our growth. This is a chart here of the deliveries and how we have constantly broken new record levels for each quarter since 2015 and adding more and more deliveries of board to the market. With a growth of 6% per year. And this means, of course, that also our exposure to purchase pulp has increased over the year. We have gone from 7% in the division to 15%.

So of course, when the prices of the pulp have gone up the way that they have very rapidly at the end of these two quarters, there is a timing effect from a contractual perspective when we can compensate for that. But we are taking actions in consumer board both on price increases. We see the first price increases have already come through in Q3 and we expect more of them to come from Q1 since most of the contracts start from the beginning of 2019. And then also internally, of course, we are doing efforts in our cost structure. So I'm confident that in the year to come, we will regain the margins that we have historically.

Attractive End-Use Segments Offer Significant Opportunities

Moving now to a more long term perspective of our business, we are active in attractive end-use segments and here you can see on the left graph the total market size of all packaging materials, which means both renewable materials, boards and such,, but also plastics, glass and other materials that are used in packaging. The market is enormous. It's €400 billion market. And on one side, 50% is used for industrial packaging. That area is mostly addressed through our sister division packing solutions and our market is the other

side, which is food and dairy, beverages, healthcare and cosmetics and other types of consumer goods, accounting for half of this market size, €200 billion.

And if you look further on the right, you see also how the distribution is between other types of material and board materials. So the dark blue part in the circle represents the amount of board, which ranges between 7% to 15% of the total packaging materials. This means that there is a huge opportunity for us if we develop good innovation products to gain market share.

You can also see that there is a healthy growth in the consumer segment, very much driven by the megatrends that Karl described in the beginning of his presentation. So between 2-3% of growth, which is a good foundation to have moving forward for us.

... While Demand For Virgin Fibre Boards Continues to be Strong

If we also move into our specific market of virgin boards, we see that the projection up to 2030 is continued growth also here. 2030 is continued growth also here. So of course it's driven mostly by the Asian regions, China and South East Asia, accounting for the major part, but also Europe and North America have quite a good growth. And we see good opportunities for us moving forward since we are active on all these three areas.

Powerful Trends Impact Packaging

Our products can meet consumers' new demands

So we as consumers drive a lot of the demand that set what type of parameters and what type of packaging is developed and there are three area share that are important as consumers to be able to fulfil from a package perspective. After a lot of challenges in food safety in South East Asia and in China to be able to reassure the consumer, us, about food safety is really important and the package needs to be able to perform in this area.

We have also seen how the trend of plastics in the ocean has been driving the sustainability discussion around brand owners, new targets and replacing a lot of fossil-based materials with other types of materials or reducing plastics in the packages. And this is of course one important area that we want to capitalise in consumer board.

The other area is to enable us all to live a fast-paced life. We want food on the go that is easily packaged in small pack sizes, resalable, able to transport everywhere to keep the food fresh and so on. So functionality of package is truly important.

And the third area of course is that we as consumers today are as empowered as ever. We want information at our fingertips, we get information very quickly from our iPhones and how the package is able then to interact the brand value to the consumers but also from a customer perspective how the packs can be tracked and traced along the supply chain is another trend that is driving our innovation work. And here you will hear more about our intelligent packaging solutions from our sister division where we are working commonly in developing these types of solutions that will help consumers and help our customers to track and trace packages in the supply chain.

Our Target is 25% of Sales From New Products and Services

I told you before that our target is ambitious on new sales from new products and services and we have a target within the division to reach 25%. That is quite a significant target and

it cannot be done by only growing in existing product areas but very much by developing these two platforms that are at the core of our innovations.

One is the bio barriers and films. Karl told you previously that we have just made the investment in Imatra Mill converting one of the machines there to produce MFC-based films and it is right now ramping up. What we're able to do then is to replace PE films with bio-based ones.

And the other area is bio-composites. And here on this chart, you can see from the easiest or the products that are closest to commercialisation, you have them on the left, and then moving to more complex product structures on the right. And you can also see our estimated commercialisation timings.

So starting from the top end, we have replacing PE films in cups for hot and cold. We will be able to commercialise during next year a solution that is bio based and being able to replace PE films with other solution. And then moving on to pouches for show for low-medium shelf life, for instance bread packing and so on, and then for lids, for trays. Those are the three areas that we are closest at commercialising at this point.

And if we look at bio composites to work on straws, caps, closures and different packaging components within liquid packaging, like screw caps, and rigid containers. Those are the areas where we will soon have products on the market. And if you really want to touch and feel, please take the chance to look at our demo stations where we have an exhibition of all these products.

And as you can see, the market sizes are big. It's €105 billion market for these applications and we see great potential here with the solutions that we have, especially in the light of the circular economy legislation that is being discussed in the EU currently.

We Have Leading Positions in Attractive Segments...

Moving back now to our current portfolio, we have leading positions in all the attractive end-use segments in premium segments. You can see here the brown is a strong position for us and coming back to Karl's discussion about the Oulu conversion, one of the machines that we are looking at and one of the opportunities that we have in consumer board is converting one of the machines in Oulu to a brown CUK machine coated and kraft – unbleached kraft machine.

The pool from the market is very strong. These brown products for food packaging are viewed by consumers as natural and sustainable and they convey that message to the consumers. You have already seen perhaps in the stores the brown liquid, the brown milk cartons, for instance. It's one example of these applications.

One of the most important preconditions for such an investment to be profitable is to have a pulp integration and to be able to control the quality of the fibres that you have in your products. If we do this conversion, we will reach high levels of market share in the brown in Europe but also globally.

... and for the potential Oulu conversion, market fundamentals are strong

So how are the fundamentals then on the market for such an investment? On the left side, you can see the capacity expansions that have been done in Europe and also the operating rate of the mills. So even though we have seen historically now for quite some years new

capacity coming on stream, the market has been able to keep the high utilisation rate. If we look at North America, there have been quite a lot of capacity reductions and here the operating rate is really increasing. And for the brown boards, North America and Europe are the whole market for these products.

We continue to grow our premium offering in Beihai...

Moving over to Beihai, I understand you are also interested in how we're doing there. China, as you know, is slowing down as an economy. Of course, depending on how the trade wars go, which no one really knows. But if you look from a board perspective, the market is still unbalanced. The capacity largely is higher than the capacity. No, sorry, the demand. So there is a gap between capacity and demand with an over capacity in many of the board grades. However, that capacity is exported to the near South East Asian region.

If we look at pricing, on the top side you have premium pricing for boards. This is mostly imported boards that are not able to be produced in China due to quality reasons and the stability of the pricing of premium boards is much better compared to the commodity grades, which you see in the lower graph. There, the volatility is also higher. So our strategy in Beihai remains the same to be able to have premium products produced locally in Beihai for the Chinese market.

...and profitability improvements are ongoing

So the focus areas for us is to continue to improve our profitability. The cornerstones of that is to continue the ramp up of the qualification for liquid boards, to introduce new premium carton board grades, which we have in the pipeline for Q1 and Q2 for next year. We have reached the design capacity of the mill and we are running stable on that level, which means that our focus now is to do recipe product optimisation, product mix optimisation and to continue with the qualifications. I estimate that we are halfway through the qualification period for Beihai.

Stora Enso Forestry Operations

Another crucial parameter for the success of Beihai is of course how efficient we are in our forestry operations. And here you can see one picture where we started where the traditional operations was very manual and today it's highly mechanised and Stora Enso is considered as a benchmark in forestry operations in China. There is no one there doing what we are doing.

We deliver sustainable and profitable growth

So to conclude, we are delivering sustainable and profitable growth, our target is to continue to grow faster than the market at a rate of 3-4%; we have strong assets, a strong innovation pipeline and trends that are supporting our business and strategy. So with that, I am confident that we will continue to deliver value in the bioeconomy. Thank you.

Q&A

Ulla Paajanen: Any questions for Annica? Linus, please, and the Lars.

Linus Larsson: Thank you very much. It's Linus Larsson with SEB. You showed on the slide that out of your sales liquid packaging boards is 36% and as I think you also highlighted, it's not the most cyclical part of your business portfolio and so you might at this point of the cycle find better profitability elsewhere. If you look into 2019, do you think that in your portfolio

optimization short term that you will see a lower percentage of liquid packaging board in your divisional sales? Maybe related to that, I also wonder about – you said you're half way through your qualification process in Beihai. How much liquid packaging board do you expect to produce in 2019 and what's – how far are you on that part of the – on the optimization process in Beihai specifically?

Annica Bresky: If I start with the first question, I do not expect us to change the product mix in a big scale. Of course, when you look at your pricing strategy, you have to look at how long the contracts are and how you change them over the years. But we need to remember that if we look at us in the perspective of the Stora Enso, it is good to have some products that are less cyclical compared to some other that might have a higher volatility. But minor changes might occur, yes, but I don't see any major change in liquid.

If I come to your second question, how far we are, the – it's difficult to answer. From an overall level, we are halfway through, which means some of the sizes of liquid packages, especially the smallest ones, those are the ones that we are working to qualify now and those are the most challenging ones because you have to – they are difficult from a production point of view for Tetra Pak and for us and it takes a lot of trials to do that. From the bigger sizes, there we are through with many of the products.

So I see that – when I say that it is halfway through, I think that we will need to get to the premium level for both liquid and other products another two years to be on the premium side. Yes. I will not disclose how much the mix is. We don't do that for the mills.

Linus Larsson: Thank you.

Ulla Paajanen: Okay, Lars and the Annareetta. And I think Gustaf, was there – somebody there. Okay, and Micke.

Lars Kjellberg: Okay. Lars Kjellberg, Credit Suisse. Just staying a bit with Beihai. You stressed when you talked about order what the importance of integrated fiber supply so you can control the fiber mix and of course, you opted not to build a pulp mill. Is that something you'd like at that mill site?

Also quite interested in your thoughts about introducing MFC, etc., as opposed to polyethylene. One of the issues for liquid paper board is the recycling and the systems set up are to separate the various substrates and you are now introducing a new substrate. Is that an issue in recycling?

Also, finally, on the bio composites, I guess part of the issue with plastics is the low level of recycling but this bio composite varieties of polymers, how would they fit into a recycling world or how would they – how do you dispose of them in a sort of circle economy perspective?

Annica Bresky: Yeah. There were three questions now. So if we go back to the first one, if you can repeat the first question.

Lars Kjellberg: Okay. The importance – you stressed the importance of all of the integrated pulp supply.

Annica Bresky: Yes. Yes. If I said that we would do a pulp mill in Beihai, that is not in our plans and we are not considering that option. Beihai should be seen as an integrate in the

total set up of Stora Enso where we buy pulp from Veracel and then we also see the product mix from a divisional perspective, so we will run the products that are most profitable for the division between the different sites that we have in the optimal way. And that is the work that we are doing now when the Beihai mill is in stable production and we can do that work with optimizing recipes and also within the different mills within the division. That's why I said we are half way through because if you just look at Beihai stand alone, that is one ramp up process. The second part is, of course, optimizing the divisional footprint.

On your question on recyclability of new substrates, this is not more complicated than all the stop[?] substrates that we have in plastics. What we see if we have bio based films is that we want to be able to recycle them in our assets. And these are areas where we are investigating together with our partners throughout kind of the industry, which sides can be developed to recycle not only liquid food service board but also these new products and since they are fiber based, I think it fits very well in our business as such.

On the third question regarding biocomposites, they can be taken back and reused to create new granules. And actually, they improve with more processing. So this is a setup that we're also looking at and these are new business models that we need to develop with our customers how we can take back biocomposites and produce new products. And from the strength that we have a s accompany is that we have so many sites where we have good experience in recycling of many materials and these are just new business models that we will develop.

Lars Kjellberg: Just one follow up on MFC.

Ulla Paajanen: Lars, sorry to interrupt, we will have a possibility to ask more questions over the breakout sessions. So quickly, three more questions, Annareetta, Micke and then Gustaf. And please, only one because we are running out of time.

Annareetta Lumme-Timonen (Solidium): Annareetta Lumme-Timonen from Solidium. I'd like to go back, Annica, to your slide where you had all these different products, buy barriers and films and biocomposites and ask about the commercialization model in the future. Are you going to remain a materials provider, which I assume is the case? And – but then, to what extent will all these different new materials then require new equipment from your customers in order to really to become commercialized and implemented and will that be both kind of a hinder for the growth?

Annica Bresky: Very good question. On the first part, we don't see that we can work only as a material provider. That's why we're collaborating with startup companies such as Sulapac is one example where we go together, join forces and use the materials with convertors and make conversion. Another example is CartoCan, for instance, where we are collaborating with a machine and filling supplier to create new products. And I think those are the business models of the future that we need to find revenue streams in collaboration with others. The other question is regarding the filling lines, and I think that one of the strengths of these materials must be to be able to be used in existing filling lines. Because, if they are not, it's going to take quite some time before they can be commercialized. So that is what we are targeting when we are doing our innovations. Thank you.

Ulla Paajanen: Okay, then Micke.

Mikael Doepel (UBS): Mikael Doepel UBS. You mentioned that you would like to capitalize on the trends that you're seeing in packaging moving away from plastics and maybe more paper-based packaging and you have the slide where you show the paper-based share of the total, which you mentioned was 7-15%.

Annica Bresky: Yes.

Mikael Doepel: What kind of a potential do you really see there? I mean, if you look five to ten years out, what can that share be then?

Annica Bresky: That is, of course, very difficult to answer. I think it depends on how good we are at bringing the innovations to the market. I think what has changed compared to some years ago is that there is a strong pull now for sustainable products that are also recyclable and that has not been the case before and legislation is coming on stream that will support that. And of course, we in our industry have a long experience of recycling material, of actually recycling materials, and that is, I think, one of the main areas where we will be able to compete.

Mikael Doepel: And then just one quick one, maybe a bit shorter term, but you mentioned that you expect to fully recover the margins that you have seen being compressed in the last couple of quarters. How long will this take?

Annica Bresky: We will start seeing effects from Q1 next year. Fully to compensate, that depends on the contract structure that we have and we will not see the full compensation during next year but it will come gradually as the contracts expire. I think we need to remember here that the prices on pulp are all time high. We expect them to stay for a while on this level. So this is an area where, as the contracts are up for negotiation, we will push the price increases through.

Ulla Paajanen: Okay, good. We need to speed up a bit. Quickly, Gustaf.

Gustaf Schwerin (Pareto): Yeah. Quick question. Gustaf Schwerin, Pareto. Can you just remind us how big the liquid board market is in China and how much is produced domestically roughly?

Annica Bresky: The liquid board market is about 300,000 tons. 700,000 tons is the total premium market. It is growing very fast but it is a small market today.

Gustaf Schwerin: Perfect. Thanks.

Ulla Paajanen: Thank you. Okay, thank you Annica. And now we will have Gilles speaking to us about his profitability ambitions. Please, Gilles.

Well positioned for further profitable growth

Gilles van Nieuwenhuyzen
EVP, Packaging Solutions Division

We Are A Strong Regional and Global Partner

Thank you, Ulla. So I would like to talk to you about an exciting business, packaging solutions, which is well positioned for further profitable growth. First of all, brief overview of the business. About €1.3 billion in sales, Q3 on Q3 growth about 4%. We have a network of

design centers, of innovation center. Three containerboard mills. Four rigid box plants in China. 17 corrugated box plants around the world, mainly say Europe. And we are active with a renewable and a recyclable raw material with positive growth trends. And I think I'd like to highlight to you we have a very diversified customer base. Over 2,000 customers. And in Q3, we reached a new record profitability level of 30%.

Ecommerce Is Driving Growth In Packaging

Now, big growth driver behind – for this business and this market is ecommerce. And you have to realize that corrugated packaging is the prime material of choice for corrugated packaging. This is external research showing that about 80% of the packaging material used is actually corrugated. So it adds a fantastic growth opportunity because the market projections that will be about globally, about 15% per annum growth, meaning that by 2021, the total corrugated packaging market will be worth around €33 billion, in Europe about €6 billion. That means from now about €13 billion in growth, market growth. So that's a fantastic opportunity.

...our Successful Collaboration With Online Retailer Zalando

Now, we are very active in this field and successful developing customers. So we have, for example, a close collaboration with Zalando. Zalando is an online fashion retailer, you probably know them, active in Europe. More than 15 years ago, they simply didn't exist. Today, about 5 billion in sales, €23 million active customers supplying and providing about 2,000 brands. So we started business with them in March 2017.

Then, a few months later, we actually started to provide them so-called tear and tape reseal type boxes which you see on the right-hand side. Because the big challenge for this type of retailer is that there is about 50% return rate of the boxes. The customers, they basically want to try out many, many different type of things and then decide not to purchase and it has to be returned. So you need to have a good solution for that. So this is type of solution that is catering for their needs.

So this is an example of how things are working because then next they are so successful they'll now start to be active in Nordics. Also, from there, and we are expanding now the business from Poland and into Germany and also business in Nordics. So this can go very, very rapidly and there's just one example of what we're doing in this field.

Sustainability is a Growth Driver For Fiber-based Packaging

Now another very big growth driver is sustainability. It's already been discussed about but clearly plastic waste, polluting oceans is in every consumer's mind. Just for an example, left hand side, BBC News. But you can also see that when you look at plastic waste on Google that there is a sky-rocketing over the last year of the number of searches of plastic waste on the internet. Absolutely sky rocketing. So consumers are concerned. And this is translating not only into European new type legislation but companies are taking action. And I just have three examples here. Tesco, Carrefour, Nestlé. And they clearly have made their ambitions clear in terms of recyclability in terms of composability and you should realize that corrugated packaging is in the sweet spot. Corrugated packaging is fossil free, it is renewable, it is recyclable, and it is compostable.

Positive Market Fundamentals Particularly in Virgin Fiber

So these are very strong goods. Markets grow fundamentals, which will drive corrugated packaging but with that also the growth of container board as the raw material. And when I look at container board, actually I see a bit of a difference between recycled container board and virgin containerboard. Because in both market segments, the growth is good, about 2-3% per annum. But in recycled container board, I see in Europe a lot of capacity additions, announced, firm or planned.

When you look on the virgin side, the picture is a bit different because the access to virgin fiber is scarce. You need an integrated pulp mill concept and the investments there are very high and significant. So the barriers to entry are much higher. So here we see a much more balanced supply demand capacity edition type picture.

Strong Performance and Record High Q3 Profit

Now, coming to our performance, we did some divestments in 2014 as we divested Corenso and in 2014 small operation – offset operation in Hungary. The track record for the last three years is quite clear. And what is behind that? Well, a couple of things. First of all, we had to make Varkaus start up this conversion a success and we managed to do that. But of course, that meant hard work. Secondly, we had some challenges in China which we fixed. And thirdly, we have been driving the output of our machines, driving operational excellence hard, getting out of existing capacity much more volume.

And then lastly and of course also not[?] importantly, admittedly on the one hand the market has been favorable in terms of pricing but on top of that, we have been working hard on our customer and sales mix and that has contributed very significantly to our average pricing and profitability. That all explains how we have reached now well over our target level of 20%. We are now in Q3 at 30% return on capital employed.

We Have a Clear Packaging Solutions strategy...

So we have a very simple and clear strategy. Three pillars. First of all, I want to grow this business and what we see as attractive product segments. Secondly, to innovate and drive customer value. It's important that we do things for customers that value what we are doing and prepare to pay for that. And thirdly, it's important to drive operational excellence because this business will always be cost competitive.

So we need to drive operational excellence in our operations supply change and sourcing. And that all can be supported by digitalization. So I see our opportunities to work closer with customers, make it easier to do business. Secondly, we're working on innovation on new type of business models on the basis of digitalization that's completely new to this industry. Thirdly, to drive smart factories, smart supply chain and smart back offices.

...With a Roadmap for Profitable Growth

So we're on the roadmap, a roadmap of profitable growth. We delivered since 2015 basically Varkaus, we made that into a real success. We recently invested about €30 million in Heinola Fluting Mill, which you are going to see tomorrow, and I am very pleased with the results. We are quite successful with ecommerce where our own portfolio and driving clear market penetration there and then we've been consolidating plants, we've been restructuring and

divesting some small less interesting business just to clean up and make it better suited for profitable growth.

Obviously, we have announced the Oulu mill conversion study. But on top of that, you may have noticed that in corrugated packaging, we keep on doing selective investments to grow the business, in China, in Poland, we just announced in Baltics, in Russia, in Sweden. And then we are obviously active in intelligent packaging.

Now, how do I see the growth for the future? Well, I think it will be about continuous innovations; it will be about a clear growth focus in container board and it will be about selective growth in packaging, corrugated packaging markets and that all supported by digitalization initiatives.

Oulu Mill – Significant Potential for Kraftliner

Now, then about Oulu. Why is that an interesting opportunity to convert? Well, as said, we made a success of Varkaus and we want to build on that success. We have introduced high quality kraftliners and this is a very big market, 31 million tons, in which we only have a small share. The market is growing about 2-3% per annum. So there's room for growth and actually, many customers we had to disappoint that we have too little available for them.

So we have a good understanding of the market and we also, not unimportantly, learned how to do a conversion because this is technically quite complex. So, we're in a very good position there and then to our box markets. Well, we are well positioned, we have a wide range of segments that we cover with a very strong position, for example, already elucidated on hat in ecommerce. But particularly in our markets, we are the number one in Nordics, we are the number two in Poland and Baltics, we are number five strong position in Russia and we are strong in China in this premium segment where we operate. And most of these markets have pretty good growth rates clearly above average in corrugated packaging. So well positioned.

Stora Enso Named Husqvarna's Most Innovative Supplier

And then to innovation. I am very proud of our business having been named by Husqvarna – Husqvarna, well-known brand owner – as their most innovative supplier. And we're not only the most innovative supplier for packaging materials. No. We have been named the most innovative supplier of all their suppliers, and they have hundreds of them. And you wouldn't expect that maybe for a supplier of corrugated packaging.

Now, the consideration behind that you can read on the sheet. But one word it'd like to mention to you is proactive. And one example of what we did for them was that we designed an innovative packaging for chainsaws. Chainsaws have an odd shaped size, so we designed a cone shaped type packaging and with that a total concept of how to stack pallets. So now, Husqvarna, they can stack 37% more on one pallet, saving therefore pallets, saving containers, saving transportation and saving CO₂. So this is what can be done and what we can achieve as a company in this area.

And then the next one is about a totally new concept in RFID tags. You know that we have been a few years active in intelligent packaging. Today, we launched at the most important conference annually for RFID industry in London, we launched completely sustainable RFID tags which we have branded eco. And these tags, so you have a chip and you have an

antennae on it, they do not contain any plastic. So it is completely renewable, recyclable, fossil free.

So that's new to this industry. The performance of that is equal to normal standard tags and on top of that we have reduced the layers from six-plus release liner to three-plus a release liner. So it is actually very cost efficient to produce them. We are targeting here about a €900 million market of passive UHF RFID tags. And that market is growing about 25% per annum. And these tags are applied and used in, for example, apparel, footwear in retail. So a great replacement type opportunity and an opportunity to grow with this rapidly growing market.

Well Positioned for Further Profitable Growth

So summarizing, Packaging Solutions, we are well-positioned for future profitable growth. Strong financial track record, very attractive growth opportunities and we're taking innovation to the next level. Thank you and do you have any questions?

Q&A

Ulla Paajanen: Yes, thank you, Gilles. You keep it. Any questions? Okay, Mikael there in the beginning and the Linus.

Mikael Jåfs: So thank you. Mikael Jåfs from Kepler Cheuvreux. Around e-commerce I read that Amazon is starting something called frustration-free packaging or it's been ongoing for a while. Could you put that into context sort of with your offering? It seems like you are offering something along those lines.

Gilles van Nieuwenhuyzen: Yes, so we – we provide a whole range, our own range. Companies like Amazon they typically are designing partly themselves, partly they rely on suppliers. So what we do is we bring innovative concepts to these type of e-commerce companies, including Amazon, and then it depends a bit how we work together. These are generic concepts that we supply and then of course it needs to be a bit tailored. So it is a scalable type concept that we – that we provide. And these companies like this.

Mikael Jåfs: Okay, just a follow-up. So you don't see any risk that, you know, their efforts would actually for a period lead to a reduced demand for, let's say, brown boxes in the certain types of packaging etc.?

Gilles van Nieuwenhuyzen: The market growth is so high that there will be some optimization but again, we can take part in the optimization because we are proactive. And – and the market growth is so high that it will negate, I think, the reduction in – through any optimization.

Mikael Jåfs: Many thanks.

Ulla Paajanen: Okay, then Linus and then with Robin.

Linus Larsson: Thanks. It's Linus Larsson with SEB. Another question on – on e-commerce. I wonder if you have a figure for how big a percentage of your containerboard that ends up in e-commerce? And if you would have a – a similar figure for the – for the – say the European industry?

Gilles van Nieuwenhuyzen: We do not know exactly where our containerboard ends up exactly but – but roughly when I look at the total market I can give that answer. I mean, the size of the e-commerce market represents something like close to 10% of total corrugated packaging. So I think that probably would give you a bit of an indication.

Linus Larsson: And would it be similar for Stora Enso?

Gilles van Nieuwenhuyzen: That is a question that I – well I'm a bit reluctant to say how much we do in there but I can assure you we're pretty successful.

Linus Larsson: Thanks.

Ulla Paajanen: Thanks, then Robin please.

Robin Santavirta: Thank you. Can I just ask you this? A lot of speculation about containerboard markets globally and also in Europe. What are you seeing short – short-term in terms of the market balance in terms of containerboard price – prices in Europe?

Gilles van Nieuwenhuyzen: Well, I am not here in a position to give any current trading updates. So, I mean, the overall growth trends, I mean, they are there. And I think they're much stronger going into the future than they were in the past. Being e-commerce and sustainability. Of course, there can be economic cycles. I cannot predict them. I don't know if you can? But, I mean, the overall growth trends they are there.

Robin Santavirta: Thank you. Can I – can I have one more just on you said the outlook is more balanced in terms of capacity additions for virgin fiberboard. Isn't historically the correlation in pricing and demand quite – quite high between recycled fiber and virgin fiber containerboard? Would you expect that to continue or is there sort of reason to expect that – that correlation to gradually disappear?

Gilles van Nieuwenhuyzen: There is historically. Indeed in some of the indices that you see there is a – there is some correlation. But on the other hand, you can also see that the market is differentiating so when you look at different performances for different types of grades you can see that some grades can come out more – more unique type positions, less related to some base pricing compared to the past. So I believe there's room for differentiation.

Robin Santavirta: Thank you.

Ulla Paajanen: Okay, thanks and then one question from Lars.

Lars Kjellberg: Just on future growth and innovation, I was slightly surprised given the focus on value-added. You talked about containerboard focused growth. Can we [inaudible] to it as bring the two together you talk about RFID tags, significant development and new product development, which is all downstream? But then you kind of go back to the upstream activity to focus on the growth there.

Gilles van Nieuwenhuyzen: Yes, so we will have – focusing in – in containerboard will be clearly the – we'll be clearly focused and I've already given an indication that we, you know, do know that we're looking at Oulu Mill conversion. And I see supply/demand balance more healthy inversion in containerboard than at least in the coming years and recycled containerboard in Europe. But we will continue to grow in all these areas. But it's – it's

obvious I think that in containerboard it's – you can make – we would make a very big step if we were to decide for a next conversion. So that is what I meant. That's clear.

Ulla Paajanen: Okay, thank you Gilles. Alright. Then next will be Markus Mannström from Biomaterials talking about his continued journey in Biomaterials.

Continuing our Successful Journey

Markus Mannström

EVP, Biomaterials Division, Stora Enso

Thank you, Ulla. Welcome everybody also on my behalf, happy to be here. What we see here behind me is to my knowledge the first rechargeable battery that uses hard carbon lignin as anode material. This battery, it – it lit a small Christmas tree almost one year ago and it has been recharged several, several times since that. More about that you can see at the demonstrations.

Solid Performance with Increased Focus on Innovation...

Now, today's presentation it's going to be about chemical pulp. It's also going to be about our innovation agenda. Continuing to where we ended one year ago I think we were one of the first to say that we foresee a stable, continuing good position when it comes to supply and demand in chemical pulp. And this is because at one year ago we said the pipeline of new investment is empty. Today we continue saying it's still fairly empty.

Some highlights over the past period, we reached record EBIT levels of 30.3% in Q3. We today run an innovation agenda with a total of 16 projects. We have also added one more feature into our approach on R&D and delivering innovation and that's our ambition to become the leading R&D innovator within the industry sector. Why this? Because I think it's so damned important when we talk new materials, new bio-based materials out of renewable sources that we really know the technologies and we know the fundamentals in what we are doing.

And by doing this in a really proper way we also are in a key position to support our other divisions in their ambition to increase the share of renewable material, especially in our board divisions when we look at processes on how we work with fiber-based going forward.

...And We Are Performing Well in Line With Long Term Targets

From a long-term trend perspective we have – we see a good trend also. Of course you see a big change from 2014 when Montes del Plata was in a startup phase. Today we are very proud to reach our – on 12-month average our target of 15% return on operating capital. I think this is an achievement in a capital-intensive industry like ours, like chemical pulp. Having Montes del Plata in our balance sheet, it's only four years old.

We Continue With our Strategic Focus Areas

Maximize value from eucalyptus pulp

Our strategy we also continue to focus with the same three pillars I communicated one year ago. We talk about eucalyptus pulp, valuation creation of eucalyptus. This is the biggest commodity that we have in our industry and we have to stay cost competitive. And our focus

is to contribute making Montes del Plata one of the most cost competitive mills in the industry.

Differentiate our Nordic pulp business

When we look at the Nordic mills we continue our differentiation journey. We have this summer completed our investment increasing the share of fluff pulp in Skutskär and next year we will complete our investment in Enocell, converting the mill to dissolving pulp.

Generate profitable growth from innovation platforms

And then I said on our innovation agenda we had increased a number of projects. We have grown in terms of organization and we have built a more integrated approach than ever in turning fiber-based material into new solutions and applications.

Demand For Pulp Grades is Growing by 2.3%...

Now to the pulp market. We see a total growth of 2.3% annually going forward. This is when we look at this from all the pulp grades on the market. Up in the right corner you see a simple comparison, a simple bar showing how much the growth segments actually grow per annum in comparison to the decline of paper pulps. All this driven by the megatrends, the same megatrends that Karl has started with today in the morning. So we see a growth for textile, for carton board, for tissue, for hygiene and specialty papers. And these are the areas that we want to play in going forward.

...And We Expect a Balanced Market in Pulp to Continue

And the market balance is going to continue. As I said, we have not seen that many announcements when it comes to new capacity. And taking into account the average 30-month period to build a new pulp mill you understand that the – the capacity balance is going to be like now or gradually even improve. On hardwood and softwood, we today have a market balance of roughly 90%. If nothing happens it could go up even to as high as 96%. I don't think this is going to happen, but this is the illustration of what is the meaning of having a lack and an openness in the pipeline that we then illustrated there below. Historical average capacity growth has been roughly 1.6 million tons a year and – and now to reach the upper picture we should see a 1.3 million tons capacity increase and that we have only filled roughly one fifth of that with the Arauco investment that will be in Chile, the MAPA project.

Megatrends Support The Demand For Virgin Pulp in China

When I said that the market is growing, where is it growing then? Well, China of course. 75% of the total chemical pulp market, that growth is in China. And why so? Well, we have a lot of local trends there affecting, similar to the megatrends that affect us. But primarily urbanization, growing middle class, changing lifestyles and there are also some disruptive elements that we have seen lately like the import ban on recovered fiber. If we assume that there would be a change per capita consumption on annual basis from 14kg to 21kg we would – we would see a change of 10 million tons annually going forward.

And these are real expectations of what we're going to think is going to happen by 2030. China has a huge fiber deficit. As long as we see similar growth levels as we have seen during the past in China, even slightly weaker growth, this is still going to drive a huge growth in chemical pulp demand in that region, in that country.

We Are Moving Towards a More Specialized Pulp Mix...

If I then move to Stora Enso, how do we position us on the market? As a pulp producer we are still fairly big. We have a total capacity of 5.9 million tons in our company. However, of that 62% is integrated, supporting our Board business, our Paper business as integrated pulp. And we deliver some 38% of this totality through the market. And – and if you look at this from how are the ratios the biggest single product that we have is hardwood, after that softwood and then smaller shares in fluff and dissolving. Also a smaller – small share in unbleached kraft pulp.

And with the transformation and the change that we do and the differentiation in our Nordic mills you also see how this is going to change, reducing our exposure in softwood, as we said in our strategy one year ago, and investing in more fluff and more dissolving pulp to reach the levels that you see on the dotted lines in the bars behind you.

...With Cost Competitive Assets

Moving then to why. Why do we do this? Why do we think this is right to do? This is a very traditional pair of cost competitiveness chart where we have the total volume on the x-axis and the cost on the – on the y-axis. In – in commodities, hardwood and softwood of course we have our Latin America and joint venture assets. They are best-in-class. Then we have a number of solid assets and then there is a number on non-sustainable assets where we don't play.

But if we compare our position on the solid asset curve in hardwood/softwood and then we look at the next curve where you look at the same thing from a dissolving cash cost point of view we see that we actually reach a much better position when moving Enocell, for example, from softwood solid to almost becoming best-in-class in dissolving pulp. We improve our competitiveness and we can then build on our innovation agenda to make an even more interesting offering for our customers.

Now, this was a very quick introduction to how we look upon the chemical market. If I'm looking forward, and also being part of London Pulp Week exactly now, I think the general sentiment is that the fundamentals remain in place. No big changes in supply/demand. Growth is expected to continue. There is a growing need for chemical pulp. Of course, we cannot take into account for possible geopolitical or global changes in trade but from an industry perspective we stand on very, very solid ground with our feet going forward.

Innovation is Key For Sustainable Profitable Growth

Moving then to innovation, this is the key for sustainable growth. In addition to innovating on fiber we do a lot of innovation on lignin, on hemicellulose and cellulose, the three components of wood. Karl already started by introducing the platform role of lignin going forward. I will elaborate a little bit more on that also.

Creating Value for Renewable, Reusable and Fossil Free Materials

With that we decided to make this table to try to put everything together for you in one slide, on how we look upon the R&D innovation agenda from a commercial perspective for Biomaterials. We identify five different areas: improved pulp properties, regenerated cellulose, micro fibrillated cellulose, lignin and bio-based chemicals.

The common denominator for all these five areas is the value proposition. When going forward we either talk improved material efficiency, do more with less and then that in combination with replacing fossil-based materials. So I think the value proposition is strong. I also think and fully agree with the comment on one of the questions earlier, does this give a premium? No. We have to be cost competitive also. We have to offer the same or even more at existing price levels.

When we look at this from a time to market perspective what we see today is all these five streams they have a little bit different aspect when it comes to time to market. Improved pulp properties we do already today. Regenerated cellulose we're going to see in a couple of years. Micro fibrillated cellulose is becoming more and more, and I think in addition to the work that we do in our board divisions, especially in consumer board, we're also going to be able to sell micro fibrillated cellulose already next year to players that use it either in specialty paper, or in cosmetics, or in coatings. It has in all these applications find – it has found its own benefit and it's going to be an additive but it's going to give at the end material efficiency. And something which is fossil-free.

Then we have lignin where we actually started commercialization already a couple of years ago and this is the platform where we – I would say we have the strongest – strongest effort and also from a near-term financial perspective I think this is really interesting. It's not only about – about batteries or phenol replacement. We have a number of other solutions in adhesives and glues. We work on applications to – to make formaldehyde-free binder which would actually open up for a much more interesting business than the phenol replacement. And then in addition to the batteries, we also last year had a demob on our carbon fiber that we bring forward.

Last but not least we have the bio-based chemicals and there, with all honesty, I say this is the biggest challenge. This is the biggest technical challenge to come out with something that we can really 100% replace a fossil plastic product. But at the end I believe in technology-driven development so it's going to come out. The technology is already there. We just have to turn it more cost competitive.

So all in all, I think the future for our innovation agenda is good. And if we look at this from a market size, whether it's tons or in euros, the figures that we see here behind the scale is so big that you understand that these become attractive opportunities. And – and there was this question about, okay, how do we do this in practice? Do we have to build a new market? No, we don't build a new market. But what we do is we come in with a substitute to existing market, come in with a better application, a more environmentally-friendly application.

Last but not least I would mention a few words about our approach to textiles. Yesterday maybe, at least those in Finland, read that the wife of our country president she's going to wear a new dress made of Ioncell, viscose type of pulp, and this is come – the pulp that – this sort of pulp is coming from Enocell mill. We look into this Ioncell technology of course but we also look into a number of other technologies where we in the future could select to participate in downstream value chains, turning dissolving pulp to yarn, further to textile.

Continuing our successful journey

All in all I think we are well-positioned. We deliver sustainable, profitable growth. We have several proof points on that. We think the pulp market is going to stay strong and solid. And

we're going to build on our innovation journey to build more renewable materials to the market. Thank you.

Q&A

Ulla Paajanen: Okay, thank you Markus. Now we have questions and please limit your question to one. And these are the questions that are between us and the lunch. Okay, Lars and then Linus.

Lars Kjellberg: Yes, Lars Kejellberg, Credit Suisse. You have a lot of innovative products. It feels a bit like you're throwing a very wide net to try to catch something. Well, why don't you comment on that? Number two, then, is just on the, similar to Gilles's comments about the big step change of course will be a containerboard mill versus other smaller relative additive products. How should we view this in the context of Karl's comment, 'We don't want to build more pulp,' but that's where you get the step-change? And then you have all these various smaller projects.

Markus Mannström: Yes, I – I think the beauty with – with the smaller projects is actually, I said we have 16 projects. We have a very focused agenda. A part of the projects are actually technology-driven, really supporting the material development. And – and each of these they have their own commercialization agenda. When we look at – we had a question on business models earlier. Do we have one business model? No, you cannot have one.

And – and – but what is the common denominator here is, you go from laboratory to piloting to demonstration. And you have to find the partners you want to play with at a very, very early stage because – because you will – we – you cannot innovate in isolation. You have to work with – with companies that have a position on – in the supply – in the – in the value chain or want to get a new position in the value chain. So it is commercial partners.

For us startup is – is one type of partner. We – we are teaming up with brand owners that are really far in the – in the value chain on other areas, for example, textiles. When – when we talk carbon fiber we already talk with the car manufacturers. Of course, they would like to have our stuff but can we jump there now? No. So the whole story is about going in steps. And if we look at this from an innovation pipeline point of view I think you need to have a number of initiatives. Not everybody will success – have a success and – and then your goodness is really – really measured on how good you are at pushing the investment or the initiatives and when you have to change course. But with the portfolio that I – we have now I'm – I'm actually damned proud of it.

Ulla Paajanen: [Inaudible] Linus next.

Linus Larsson: Yes, thank you. Again, it's Linus Larsson with SEB. I think Biomaterials is at the core of Stora Enso as being the – the renewable materials company yet – and – and you are extremely bullish when you talk about the outlook for – for chemical pulp and the next, say, five-year outlook and beyond. Yet you are not investing in the same way as some of your peers. You do not have the most modern Nordic pulp mills in place if you compare with Metsä Fibre, SCA. What's – how should we think about that and how is your discussion going? Don't you feel that you might be missing out on a great opportunity here? Don't you

feel that you might be in for the need of – of a big round of – of upgrade in – in the Nordics? And when will we see the next big pulp mill investment in Stora Enso in – in the Nordics?

Markus Mannström: I think the next big investment in a pulp mill in the Nordics for Stora Enso we'll have to wait – wait quite a while. But what – what I would turn it around and if I look at this from – from a differentiation point of view, I think it will be much more attractive to see that we would actually have regeneration plant in Enocell where we make the dissolving pulp and either us or together with somebody. Or even somebody else is taking the integrate synergy and setting up a plant where we turn dissolving pulp and cellulose into yarn. And I think it's much more attractive as an investment opportunity.

Ulla Paajanen: Okay, thanks. And I think the last question now comes from Micke.

Mikael Doepel: Mikael Doepel from UBS. Do you expect to see any changes in the – the wood chip supply to the Asia markets? And if so do you expect this to have any bearing on the chemical pulp demand?

Markus Mannström: I mean, most of the Asian suppliers they rely on imported chips. Some of the – or in China. Some of the players, I mean, even having their own production, even having forest assets in China, they still take the wood in chips from – from elsewhere. I think that going forward and as we see the real focus of – of the chemical pulp business from an industry point of view, it has been very strong focus on Brazil lately. We see the Asians entering Brazil, big-scale in – in M&A both on – on industrial operations and also in taking over forestry. And I think that if we look at it from their perspective I think it's their understanding that they have a huge deficit on wood. They are going to have a huge deficit on chemical fiber. They're going to source it outside their own region.

Ulla Paajanen: Okay, thank you, Markus.

Markus Mannström: Thank you.

Ulla Paajanen: We will – I will give some instructions about our lunch. So now we will have lunch and it's served downstairs. You turn here. When you go outside you turn left and take the stairs down. There is the restaurant where the lunch is served. And please be back at 13.30 when we will start and then also if you have time please have a look at the demonstrations in the hallway. Thank you.

Accelerating Profitable Growth

Jari Suominen

EVP, Wood Products Division

Ulla Paajanen: Okay, good. Still some people coming in but I think that for the benefit of the people in the web, we should start. And the next presenter is Jari Suominen, who is the divisional head at Wood Products, and he will tell us about how to accelerate profitable growth.

Skyscraper in The Making

Thank you, Ulla. I have the famous position to be first after lunch, but I have a pretty interesting story to tell you, so I believe I can keep you awake.

Dear ladies and gentlemen, what do we see here? We see seedling, we see tiny tree, but in wood products we see much more. We see skyscraper in the making. With our new innovations, massive wood called CLT – cross-laminated timber, LVL – laminated veneer lumber, we can enter into new areas in construction which had been earlier dominated by steel and concrete. So, completely new markets where wood has not been earlier.

This tiny tree – what do you see here? That might become a 14-floor highest wooden building in Finland. This is built in Joensuu, or it's under construction at the moment. And this tree will grow back in 20 minutes in Finnish forest. This is showing we are speaking about renewable material. And we are using some 2,000 cubes of CLT and LVL for this building.

Then, this tiny tree might become a seven-floor-high office building in Sydney. This building is entrance for ultra-modern area called Barangaroo, where are tens of thousand people are working and living there. By using wood in construction, you can reduce your carbon footprint even up to 75%.

This tiny tree might become Head Above Water. This was built front of London city some weeks ago for Design Week. Personally, I like this a lot because this is showing easily all advantages of building with massive wood. It's light. Weight is one fifth when comparing to concrete. It's easy to assemble. It's fast to build in difficult locations. Like you see, there is water around this Head Above the Water and it took only 40 hours to build this. And last but not least, there are amazing shapes, like you can see. All of those have been produced industrially. No hands has touched them. Those are produced in our Austrian factory, based on the newest technology in cutting machinery. Karl[?] presented you several mega trends and all of those are favoring the building with wood. It's resource efficient, it's fast and it's carbon efficient as well.

The leading Provider of Innovative Wood-Based Solutions

Dear ladies and gentlemen, I would now like to move towards our strategy, but I would like to start a bit with our track record because a lot has happened in wood products during past five to six years. And we have here presenting three steps.

In 2012, we started in financial difficulties. We started restructuring program, we saved €50 million, but now when I'm looking backwards, so we came much, much more than just

cost savings. We created new lean base and we created continuous improvement culture for our division.

Then in 2015, we were selected as a growth business, but growth just for selected value-added products. But on top of that, we recognized that we need to develop our processes and we started business development program to make our long value chain transparent. Like you saw, our value chain start from this tiny tree and it's ending up to high-rise building somewhere around the world. And this value chain, we want to digitalize[?]. And now finally, 2017 onwards, we as a division, we have been growth business overall.

We Deliver on Our Targets

Then I would like to remain in this topic and show you a bit our financial track record. And if you're looking now, since 2015, when we were recognized as a growth business, our turnover has increased more than 4%. Our EBIT has increased 75% and we have reached our return on capital employed target clearly. Naturally now, 2018, the favorable business conditions have been also supporting that.

A strong Position Based on Superior Offering

Then I would like to move towards our strategy and one question is that why – where are we unique, and how do we differentiate? And one major area is our offering.

If you look on left side, so what I like in this picture is that you get complete view of our strategy in one go. In left side, our products. We have unique position that we are one of the very few one who can offer all wooden components for high-rise building. But we are not stopping there. What is making us truly unique is the fact that we can combine product to services and then the service is based on digitalized[?] tools. If you take as an example CLT, that is massive wood. That we developed further the building components like you see in Middlesex and all those components are already included in so-called building information modeling, which is this kind of 3D tool for architects and designers.

So, this is what is making us unique and this is what we want to develop in future.

We Have Grown Through Innovation And Investments

Then I would like to move same area but giving you update what we have been doing during this year in this area. First of all, upper left side, you can see robot. Where we want to develop is automatization. Overall, saw-milling business is seen as undevelopment – undeveloped, if you're looking technological wise. We in Wood Products, we do not see that as a weakness. As opposite, we see that as a great opportunity and this is now area where we have started to work. This example is from Brand mill in Austria.

Then middle section, middle picture, upper side is Gruvön[?]. There we are starting, or we are at the moment starting operations of the biggest CLT line in the world, completely automatized. And we are even not stopping there. And right side, you can see rib panel and we further develop part of our CLT to rib panels and we started that production in Ybbs[?] mill in Austria this year. And in bottom side, you can see virtual reality. There is one station you can visit – you can see how that is working. And then we have biocomposites. Those are coming back later on.

Commercial Office Concept to be Launched 2019

And then, I would like to continue and show you a bit activity for next year. We are planning to launch office concept 2019. In right side, you can see the 3D models we are already working with. And overall, if looking all our different building types, where we have had the most positive surprise has been offices. Only during couple of years we have had more than 30 big office projects and here you have just couple of examples. We have this Barangaroo from Australia. We have a green[?] building in [inaudible] from Paris. Bottom and middle is coming, Supercell office here in Wood City, just 50m from here. You will see that area still today. We had ground-breaking ceremony last Monday.

Google Chooses Renewable Materials

But now, I would like to show something very special where we are working at the moment and I think that is from my perspective one of the most beautiful buildings, wooden buildings, I have ever seen. And this is showing also that this giant, Google, they want to select renewable products, they want to select wood for their construction. And this is called – this is London head office for Google, which is under construction at the moment. This is massive building. This is including even 8,000 cubes of CLT. And like you can see, this is the direction today that wood will be visible. Even trees are growing on the roof. And we are the main supplier if we are looking the wooden parts there. I think this will be great landmark in London and even globally for wooden construction.

A Wooden Platform Connecting Innovative Services for Wooden Buildings

Then I would like to move a bit to present you that we are not just limiting us to these materials, components, but also this digitalization and developing wooden value chain is focus for us. And I will use a bit time here.

Here you can see the life cycle of wooden building. We start from this on an engineering. We continue with construction. Then comes operation. And finally, the building will be demolished. If you are looking at the left side, architects, designers, these 3D tools are available already. Our components are there. But now we are working to build on top of that virtual reality tools. And there we have selected as a partner for us TRÄ Group, start-up company for Finland, and jointly we are developing these solutions.

It will make it for architect extremely easy to design the house. By using virtual reality classes, you can move the shapes, you can move the walls and all calculations are following. I just heard even that you can build acoustic there – that if you change something, you can hear how that is influencing on acoustics. So, huge potential in that side.

If we move from design phase to factory, so this building information modeling, 3D tools, also are sending directly information to our factory, and we are using that information in our cutting machinery and we can create those beautiful shapes without any hands touching. When the components are ready, we will send those, so supply chain will be playing vital role because we will deliver very different kind of components from many different mills and all of those need to be just in time in construction place. And that is the reason why we are going to use RFID tags to follow that we know exactly where our products are.

Then, when products are coming to construction site, again, we can use virtual reality or augmented reality to follow where the component exactly need to be installed, again saving time there. And in our factories, we will install sensors in our components. It's easy to install

to wood. And we can then finally follow the temperature, moisture of the house, and that will be great benefit for maintenance companies or of course for people living there.

And finally, when you are looking massive wood and we are looking recyclability, it's easy to take out and move to next location. And I think that most of our products in future will be recycled and that will be easy.

Biocomposites will Generate Further Growth

Then I would like to move to biocomposite and present our newest product. Karl has presented that already at the beginning. I would like to go a bit more in details there.

And where we are proud that now first time we have a truly cost-competitive material compared to general purpose plastic. We are still in position that we have, in this end product we have 50% polymers, or plastic if I may say, and then we have 50% wood. But we are working continuously to increase the share towards 100%.

We have started the production. We have the biggest compounder[?] line there in the world and we are now further developing and establishing Competence Center for the very same location.

And we have marketing production ongoing. We established DuraSense by Stora Enso brand. We have had first commercial deliveries to Orthex categories and H&M hangers. We are not producing of course hangers – we are producing granules like polymers at the beginning we are – and then we are working with H&M and then its third party who is finally producing the hangers. And we have exciting development ongoing with NorDan, who is our window customer. This is the picture down bottom side, right side, and this is a window, round shape which is normally difficult to produce. It has been produced from biocomposite based on 3D printing technology.

And then, I would like to summarize what does these all activities mean from monetary perspective and from potential perspective. We have categorized this in three different areas. We have Building Components and Solutions. It's €300 million to €400 million. We have Classic Planed, which is [inaudible] product. But based on our service models, integrated distribution concept, we can differentiate to competitor – competition – and we have even existing capacity available, so no major CAPEX really required there. And then we have Biocomposites. So, all of those are representing next five years huge potential, giving potential range of €600 million to €750 million or annual growth of 6% to 8%.

So, dear ladies and gentlemen, I hope you got positive impression regarding our ideas and also you believe that when this tiny tree will become big, it will be something great. Thank you.

Q&A

Ulla Paajanen: Thank you, Jari. And now we are ready for questions to Jari. And I don't quite see you all as well as the others, because you are in the shadow, so please keep your hands up for a certain period of time so I can pay attention to you. Okay, Lars.

Lars Kjellberg: Yeah, thank you. I just wanted to come back to your – with the sort of platform of building components. You, of course – you supply services, the, you know, design and engineering or the software if you like. Can you in any shape or form pour us out[?] what sort of revenues you can put into the non-production part of that business?

Jari Suominen: Yes. Of course, we are – very good question now – we are in starting phase. And why we are developing this? This is of course to make wooden building overall total ecosystem and value chain more efficient. It will create us new demand. By creating that, it will make us attractive partner for any construction company or any partner in[?] value chain. And then finally, we will end up that part of these services we will sell. But at the moment, we are in starting phase. Like I mentioned, we are – we have developed a lot, but when then we can see the end results when we are ready. We see there are significant potential, but we need to remember there are these three different areas where we are getting advantage. Okay.

Ulla Paajanen: Okay, Kevin next. Here.

Kevin: Yeah. On these potential figures you mentioned for the three different areas, what kind of – do you have the capacity to reach that or are you just waiting for the market to mature or what kind of investments do you need to put in behind that to be able to deliver that kind of growth?

Jari Suominen: Yes, so there are many access[?] needed. So, there are certain areas where limited CAPEX is required. Certain areas, like this building components, some CAPEX is needed. But then of course it's a lot market creation as well. In our side, CAPEX, if you are making one single project like new CLT line, CAPEX is limited. We are speaking about roughly €50 million and those we are developing step by step based on business development. So, we are not speaking about similar kind of figures, what has been referred already today.

Kevin: These €700 million potential, €750 potential – is that – that's on a revenue level?

Jari Suominen: Yes, that's – exactly, exactly, yes.

Ulla Paajanen: Okay, thank you. We have still time for one more question. Okay, Harri.

Harri Taittonen (Nordea): Thanks. Thanks. Harri Taittonen, Nordea[?]. Just sort of thinking about the kind of connection to the wood supply, I mean with all these developments, is it so that basically you will be able to kind of compared to the traditional saw mill you will be able to use sort of smaller-diameter wood going forward? And then just thinking if it sort of has an impact on the wood sort of sortiments[?] that you're getting from the forest and whether it might have sort of implications on the sort of pulp board availability versus saw log availability. Or is it too far out?

Jari Suominen: I don't expect that we have huge influence on pulp wood availability in this case, but area where we are developing – trying to limit[?] our wood complement organization is to develop these newest technologies to select correct kind of wood. Earlier, saw milling was based on so that there came raw material in mill and we made best out of that. Now we have turned the business model completely upside down. We understand what customers needs, what other products, and then we know what is best product, what is best wood space[?], wood size for that kind of product. And then we are only[?] our wood procurement, we are – based on latest technology, we are searching exactly the correct

location where to find it. So, the business model has turned a lot and this is the big change. Not possibly that are we using more big trees or smaller trees.

Ulla Paajanen: Okay, thank you. Thanks, Jari. Okay. And now we will go ahead with our program and we will have Kati ter Horst speaking to us how to create value in paper. Kati, please.

Creating Value in Paper

Kati ter Horst

EVP, Paper Division

Thank you, Ulla. So, good afternoon, everyone. It's my pleasure to meet you all here today. And I will, the next – I will spend the next 15 minutes to talk about value creation in the exciting world of paper.

Our Ambition is to be The Most Sustainable Value Creator in Paper

So, I would like to start with a short summary of our business and give just a couple of comments here. So, our sales in paper now total to about €3 billion and about 80% of our deliveries go to Europe as our home market. Our sales growth now in the third quarter this year was 7.2%, very much reflecting the higher paper prices and better mix.

If we then look at our customer base, we have a very balanced customer base and we are basically delivering to all of the major end users of graphical papers, from newspapers to retail advertising, luxury magazines, books and then copy paper.

And if you have some time, please look at also at the paper stand and you will see some of the very well-known newspaper titles as well as some of the magazine titles and many of the books that we actually produce the paper for in Anjala mill, which is the biggest book paper producer in Europe.

If we then look at sustainability, 90% or a bit more than 90% of our paper brands carry one or more eco-labels, and this is basically reflecting our leadership position in sustainability on paper market.

Since 2013 We Have Transformed Our Paper business...

Then looking at the result, now in the third quarter this year, our EBIT rose by 125% to €65 million. And then if we look at cash flow to sales after investing activities, that stood at 8.3%, which is well above our 7% long-term target.

How has our transformation then looked like in the past years? I will talk about that through some numbers. So, since 2013, the European paper demand has declined by 17%. In the same period, we have restructured our production capacity in paper by 33%. However, our deliveries have declined clearly less, as we have been moving our best paper orders to remaining paper machines, and in that way also have been improving the operating rates.

We have also put a lot of effort on safety, by training and coaching our people to create the very robust safety culture. And I'm very happy to tell you that our total recordable incident rate has declined by 82% since 2013.

Then finally, we have improved our customer satisfaction. Measured by the Net Promoter Score, we today have 20 percentage points[?] better customer satisfaction that we did in 2013.

So, you could say that we have responded to the challenges that we have in the market by restructuring our business to a better profitability.

...And Have Delivered Continued Solid Performance

How does our journey then look like in terms of sales EBITDA and cash flow? When you look at these charts, I think it's important to remember that today we have about 2 million tons less production capacity than we did in 2014. And still, looking at EBITDA, we are in the past 12 months very close to the level of 2014, in absolute terms. And then if you look at the margin, clearly higher, reaching to 11.5%.

One good of course thing that this is very much the result of the paper price increases that we've been having, and of course they do contribute. But for instance, the newspaper prices were about the same or even a bit higher in 2014. And remember the cost increases as well from pulp that also impact paper.

Then on cash flow, cash flow is the most important target for Paper division, so market situations have been different on different years, but I would still say that we have continued to deliver cash flow to sales percentage very close to our long-term target of 7%.

Our Strong European Assets Serve Global Markets...

So, with these actions that we have taken ourselves, we have restructured our business to become a predominantly European asset base that is stronger than ever to serve the global markets.

And what you see here on the right side is our current asset base. So, our Nordic mills being very close to the forest and our mills in Continental Europe then being close to consumers and close to the recycled paper streams. And then we have one joint venture in China, serving the local market.

On the top corner on the left, you see how our restructuring in asset base has looked like in terms of the different product segments. And the biggest change here is that we have become clearly a smaller player in coated mechanical crates[?] and this has been our strategic choice, to exit the standard LWC business. And then you could ask why have we done this. The reason is that we have very strong improved super [inaudible] paper assets. And they effectively actually compete exactly in the same end user area as standard LWC.

So, to summarize the restructuring part on assets, you can say that since 2013 we have either sold, closed or converted 2.7 million tons of paper. And if you want to see what that looks like in Europe for your reference, you can see that in Europe that has been about 8 million tons.

...And An Improved Market Balance Has Driven up Prices

Let's then continue to look at what have the markets looked like. And my main message with this slide is that it's not about the demand decline – it's about market balance in this business. So, if you look at the left side, the blue bars are representing the practical capacity in Europe for graphical paper crates and the green bar is combining the European demand with exports. And exports today represent about 3 million tons.

And European markets came in balance towards the end of 2017 because of the restructuring actions that industry had taken, but also supported by strong export markets, especially in China. And market balance means healthy paper prices and that you can see on the right side. So, fine paper prices started increasing already, 2017 clearly, supported by the high pulp prices, and then when the market came in balance now publication[?] paper prices have moved this year.

So, from here I would like to continue to talk about some other areas that we do in paper to create value for the future. So, the three areas I would like to touch upon today are commercial excellence, focused innovation as well as smart operations and I would like to spend a little time on each of them.

How We Will Create Further Value in Paper

If we start with commercial excellence, I guess the statement I want to make to start with is to say that we are really there out of the markets, we are really winning to – we are playing to win on these global paper markets. We may be predominantly European producer, but we play on global markets.

So, what we do is that we are utilizing our business intelligence arm, as well as our global market presence, to understand and to predict where these markets are moving. And then how we run sales is that we optimize the sales between our production assets and the markets and we steer pricing centrally. To give you a bit example on how this works, I could refer to the situation in the fall last year.

So, we could see that Chinese newsprint producers were really short on fiber and that was coming from these import restrictions[?] of recycled paper. We also operate in China with our mill, so we could see what happened locally. This was boosting paper prices up in China, and we decided actually then to allocate a clearly bigger part of our newsprint production to profitable Chinese orders. And, of course, we did this also to support the price negotiations in Europe. And the end result today is that one of our biggest newsprint customers is actually Chinese. And you may also know that the transportation costs to China are quite competitive.

Focused Innovation

So then I would like to move to talk a bit the focused innovations in paper. So our innovations are not so much geared on growth as you can imagine, but they are more on these the three areas. So the first one is operational excellence, the second one is new and improved paper products and the third one is then related to non-paper related new businesses.

Operational excellence

So operational excellence, in short, is about keeping our paper assets competitive, but also continuously working on improving our processes and the ways of working. I will shortly come back a bit to this through some clean energy investments that we have been doing lately.

New or improved paper grades

Then on new paper products, so Stora Enso has actually been a forerunner in the industry to develop new paper grades with – together with our customers. We are also the company that

launched and developed the SC grade to start with. And Multicopy Zero here is an example of a bit different kind of development, so it's basically fulfilling the customer need for carbon-neutral copy paper.

Non-paper related new business

And then the third one, as Jari already has talked here about – the biocomposites. But why I bring it up here is that where did this investment actually start with? It started with a question at our Hylte newsprint mill that, now that we have closed two of our four newsprint clients, what can we do actually with the excess thermomechanical pulp? And then the answer was to mix TMP with plastic granules to make biocomposites for many, many end uses. So this is how we can use our assets also for something else.

Case – Focused Investments in Green Energy

Belgium

Then coming back on green energy, so the first example comes from Belgium from our Langerbrugge Mill where we have, since 2016, been delivering green energy in form of heat to Volvo Cars in Ghent. And this has meant for us some cost savings and then for Volvo Car, it has mean that they have been able to reduce their CO₂ emissions by 40%. And that equals to about 5,000 households' heating in the area.

Germany

And then last summer, we announced an investment in Germany – €25 million investment in green energy production at our Maxau Mill. This investment will clearly boost the cost competitiveness of this mill for the future, and as well it's reducing our CO₂ emissions by 50,000 tons a year, so quite a big change.

Sweden

And then the latest announcement has been our cooperation with Gasum at our Numölla Mill in Sweden. And there, Gasum will be producing liquefied biogas based on our wastewater effluent. And, to kind of describe what kind of production volume we're talking about, at least in the beginning it will be equal to the fuel needs of about 200 long haul trucks on annual basis.

Smart Operations

Paper Production System

Next, I would like to move to talk about smart operations. We have a system called Paper Production System – a very innovative name – and this Paper Production System is our common way to run our nine paper mills – 19 lines, nine paper mills. It's based on the lean manufacturing principles, and there our target is to continuously to improve the productivity and to reduce waste.

To give you an example of one achievement in this area is our Anjala Mill – quite an old asset already. But just continuously working on this productivity, they have actually improved profitability, purely based on productivity, by €8 million in the last three years.

Digitalization

Then, we are, of course, developing the competencies for the future, continuously thinking what kind of competencies do we need, what do we need to change? And digitalization plays

a big role in here. So we have several projects going on looking at predictive maintenance, predictive operations. Then, of course, remote process control is one: where can we add robotics more? And then we are thinking where could we use drones to do certain simple checks, or checks in very dangerous places.

Asset strategy

And then coming back to assets – continuously reviewing our assets, so pulp, lines, paper mills and our energy setups to see whether we invest. And, of course, our paper assets also offer the opportunity for other Stora Enso businesses to invest in. And I think Varkaus is a good example of this, as referred by my colleague Gilles already.

Creating Value on Paper

So to conclude a bit, how are we then going forward to create value? I would like to build it on the next three pillars.

So we will continue in paper business to work on improved efficiency and we will continue to reshape our cost base. Then secondly, I dare to say that we have the best commercial global team out there, and their task is to make sure that we maximize our sales result and we create the value for customers also in the future. And then thirdly, we will have selective investments in our assets and in our paper grades as well as in the business models.

So, I would want to conclude by saying that I think we have held position in paper at Stora, and so to continue to deliver a solid profitability and cash flow. Thank you for listening.

Q&A

Ulla Paajanen: Thank you Kati, and now we will take questions for Kati. Okay, Robin and then Markku, then Mikael. Let's start with these three and see how we do with the time.

Robin Santavirta: Robin Santavirta, Carnegie. Can I ask you about the profitability of your exports to Asia or China in specific? Is that competitive – the profitability – if you compare to the European business with these prices that we have in the market at the moment?

And then the second question, your capital expenditures in this segment, what are we are talking about on an annual basis this year and 2019?

Kati ter Horst: Answering your first question whether our exports to China are profitable, they are and compared to Europe, they are as well. Chinese pricing is very short term – about quarterly pricing – so it's also very easy to allocate, take back and move with the market. It's not that we are selling all paper grades to China; we sell the ones where we can make – make good profits. So it's not a, let's say, swing market for us, so as long as the conditions are as they are, we are committed to sell to China.

Then the second question on capital expenditure, it, of course, varies a bit every year, depending on what happens. But – but it's – it has been, next to the maintenance, clearly below €100 million in paper on annual basis, and I think that's about how we will continue – a bit less maybe, even.

Ulla Paajanen: Good, okay. I guess Markku is next.

Markku Järvinen: So I wanted to ask about the Oulu potential conversion and what does that mean to your business in coated wood-free. Will you exit that business, or what will happen?

Kati ter Horst: Well if Oulu would be converted, then we would exit wood-free coated business, because that's the only place where we still produce wood-free coated.

Markku Järvinen: Okay. And then let's say the sort of potential that your assets offer to other businesses, how do you review that potential, or is it left to the other businesses? And where do you see the most further potential?

Kati ter Horst: We review that together, so we look at paper; that's what are the kind of segments that we see carrying with the best profitability going forward, what are the opportunities we have in the assets to develop them. And then we discuss them with our divisions. And if there's something in there, then we will together see if there's a need for a deeper study to go forward and look at the opportunities. I think it's good to always have several alternatives at your hands.

Markku Järvinen: Thank you.

Ulla Paajanen: Okay, I think it's Mikael Jåfs here in the front next.

Mikael Jåfs: Thank you, Mikael Jåfs, Kepler Cheuvreux. You should us the slide there with the continuous demand decline that has been ongoing for many years. Could you – no one can give a prediction, but how are thinking around this demand decline? Will it continue at the same pace faster or slower going forward?

Kati ter Horst: If you look at the past – and we will talk mainly about Europe now – it's been somewhere between – all paper grades between 3% and 5%. If you look at this year, the seasonally adjusted demand decline in Europe has been 4.2% for – for the first seven months of the year, I think, compared to last year. But we have to remember that there are big differences. So newsprint continues to go down the most – about 8% currently. And then if we look at improved newsprint grades mainly used in retail advertising, that's actually plus 1.5% for this year.

And they are basically made on the same machines, so improved newsprint is compensating for newsprint as well. And even though newsprint now declines, it declines mostly in the newspaper end-use, but newsprint is also used in retail advertising. And basically when paper prices go up, you cannot downgrade further than newsprint; there's no lower grade, so I think it somehow also will support that.

But to your question, do I expect paper demand to decline? Yes, and probably about the rate. So we are at least – that's how we plan our business: that the decline will continue.

Mikael Jåfs: Thank you.

Ulla Paajanen: Okay, one more question, I think it was Lars then, next.

Lars Kjellberg: Yeah, just on the same topic, I guess the – it seems to be a bit of an acceleration in demand decline this year versus the prior year, and literally every week there's a printer going bankrupt somewhere. How do you see the price elasticity to demand, and it that a – how do you think about that as you go into next year's price negotiations?

Kati ter Horst: You can imagine that with our discussions with customers that the question comes often, that, you know, 'Aren't you kind of killing the demand by increasing the prices?' Like I said, paper prices are not historically high now; they have been coming down also for many years. That has not prevented the decline.

It can, of course, be now when prices go up, that there will be some more digital – worsens, there will be a bit less paper used because people have to live with their budget. But, for instance, retailers then, when something else happens, they also come back to their original budgets. So I don't think it will have a big impact in the demand decline as such; it may have an impact for a couple of quarters or something like that. So in that sense, that demand decline is not impacting our way of looking at price discussions.

Ulla Paajanen: And since Kati cannot join us for the breakout sessions, maybe we allow one more for her, and I think Harri was there with a question. Okay. Did you have something still, Linus? Okay.

Kati ter Horst: Okay? Good, thank you.

Ulla Paajanen: Good. Okay, thanks a lot, Kati. Okay, and now we will have our CFO, Seppo Parvi, concluding this presentation slot here, and he's going to talk – how to drive performance in the bioeconomy. Seppo, please.

Driving Performance in the Bioeconomy

Seppo Parvi

Chief Financial Officer

Three Building Blocks to Drive Performance

Okay, thank you Ulla. Ladies and gentlemen, I will share with you how in Finance we are helping, first of all, Stora Enso to implement the strategy and how we are driving performance from the operations and the bioeconomy that we have been talking a lot about today. And we have actually three building blocks when it comes driving performance.

Automation and digitalization

First of all we are working on automation and digitalization in order to reduce the costs and improve efficiencies, and RPRs – RPAs is one of the key things here that Karl was referring to already earlier today.

Selective strategic investments

Then, we are, of course, screening the capital expenditure proposals and ideas that we are getting, to make sure that they are meeting the strategic targets and criteria that we have set in our strategy.

Robust asset management

And then we have to ensure profitable growth with robust asset management.

Automation Improving Efficiency and Reducing Costs

Fixed costs to sales target

Then to continue on to automation, and – and how we are driving out the costs in the system. Of course, already for a long time, we have been working on continuous profit improvement

and other traditional ways to reduce the costs, also to improve the top line and improving the efficiencies. Improving efficiencies has been one of the key topics and themes this year to get more out of the existing assets. And that will, of course, also grow the top line and help to reduce the fixed costs, the sales ratio that we are targeting to come down to 20%.

Robotic Process Automation (RPA)

But that is not, of course enough; we need to do something all different and also think out of the box. And that is where we see a lot of opportunities with the RPAs and automation and robotics. We have been already piloting those already for the past couple of years, and now we are coming to a phase when we are moving to production phase. This year, we are targeting to have our 33 robots up and running. About half of those are in Finance, but we are also looking at opportunities when it comes to HR, Sourcing, Treasury, etc., and other functions.

We are already capturing some opportunities. The good example is that we are currently insourcing from India from a third-party service provider – our financial delivery services, when they have been taking care of basic accounting and invoice handling. And we are setting up an operation in Tallinn with 80 people. There has been about 300 people in India doing the same. And with the help of robotics automation, we can save actually €3 million a year, and I think that is just the beginning. But a good – good business here's an example of what can be achieved and done.

Demo of Robotic Process Automation (RPA)

Sales invoice PDF printing for VAT declaration

And the next to going forward is to move more and more into end-to-end process streamlining and robotization and automation. I will share with you shortly an example on a robot. This is a real example – how it's running, how it's working – and this specific robot is about sales invoice PDF printing for VAT declarations. It is processing about 1,000 invoices a month in Finland and Sweden, and it is saving about 56 hours of manual – men working. And it is again a good example on how it is done.

So let's see on the robot example now. And it is based, of course, on a local-written and flow charts on how the work is actually done, and it will be moving between different systems. It goes to SAP, it will then go to our Phoenix system to collect data and manage the data. And this is actual – the real speed, it's not speeding up; it has done it automatically based on the logarithms. Here it's in the Phoenix system, then it will extract data to Excel and process the Excel sheets, PDF printing and now in Excel. And then at the end of the process, it is sending an email to an account. But then what account? And it's doing – doing some – sending to check and to make sure that everything went okay, and there are no hiccups. And then it's sent to the tax office.

It's a very simple, good example on what can be done and achieved. And as I said, our target is to have actually 33 of these kinds of robots in production use already this year.

Strong Evidence of Profitable Growth

Sales

Then going forward and what we have been delivering. Over the past five years, we have good underlying growth visible in the businesses excluding paper. And also the past three years actually, the whole Stora Enso top line has been growing about 3%.

Operational EBIT and ROCE

And we are not only growing, but our profitability has been going up even faster. If you look at the EBIT development, we have been growing over 13% per year over the past five years.

Delivering successful transformation

This is also visible under strategic targets that we announced four years ago at the Capital Markets Day, and many of you were present at the – at the Capital Markets then – Day when we showed the new targets. And many of you were skeptical that – can we ever reach those? And no wonder, because many of those were red and yellow at the time.

But now you can see that if you look at the Q3 this year, we are delivering; we are on green on most of them. There are a couple of red spots left, but we are confident that we can reach the targets there also. The targets must be and are challenging, but also we need to deliver on those.

I should explain about the fixed costs to sales ratio working there with the automation and traditional ways to improve the cost structures and knock out costs from the system. And Annica already explained what they're doing in the Consumer Board business to close the gap.

Access to Wood a Critical Advantage in Bioeconomy

One of the biggest forest owners globally

Then coming more back to bioeconomy and key drivers there, and one of the key things there is – as you have heard earlier today also – is access to wood. And that is the critical advantage you need in bioeconomy, and there we are in a strong position; we are one of the biggest forest owners globally. The value of the forests are about €3.3 billion on our balance sheet.

Productive forest assets in Sweden

But it's not only that you own the forest; you must have productive forests as well. And as an example, here, we have the figures and statistics on our ownership in Bergvik Skog. This also explains the background and thinking we have when thinking about the restructuring of the ownership in Bergvik Skog. We believe that this way we can release more value from our forest assets, for instance, in Sweden.

If you look at the productivity of the forest, square meters – sorry, cubic meters per hectare as – whereas IFRS value per hectare compared to one of our major competitors there, as an example. Or if you look at the potential pace of the external data from third parties and then do the math and see the potential there is to be captured. And with the restructuring of the owners in Bergvik Skog, we truly believe that this is something we can deliver going forward.

Active CAPEX Management

This also leads to capital expenditure management. And already back in 2015 when our capital expenditure was close to €1 billion, we were saying that we are – saying that we were coming to the end of the asset transformation, and that we are planning to bring down capital expenditure from €1 billion to the same level with the depreciation of the – of the Company, as well as €100 million roughly for the biological assets. And we're actually there now. And we've also given now guidance for next year, and we are planning to keep and stay on the same path. So our guidance is €550 million to €600 million also for next year when it comes to capital expenditure.

Opportunities Prioritized*Robust capital allocation*

But this, of course, means that we need to keep an eye on the projects, and you have seen today that we have a lot of projects, a lot of opportunities. And that's, of course, very positive. But in order to manage that, we have a – and must have – a very systematic approach when screening the proposal, filtering them. And we are using a very robust, systematic way to value the proposals, to look at what makes sense and what doesn't.

We have Investment Working Group that I'm heading, where we go through the proposals, screen them, compare them and run through those in our cash flow modeling, taking a longer-term view – 20 or 30 years – to ensure proper prioritization between the divisions and inside the divisions when it comes to major capital expenditure projects.

And also as part of the process, we ensure that the projects we pick and choose are meeting the long-term strategic targets mainly, as said, relating to return on capital. So that's the key driver.

Sustainable Business Equals Profitable Business*UN's Sustainable Development Goals (SDG)*

Then moving to a bit – different topic, sustainability, which is, of course, the core of our strategy, and we truly believe that business in the long term cannot profitable only if it is sustainable also. There are 17 Sustainable Development Goals defined by UN that we follow. We have picked three of those as the focus in our strategy, and also in financing and funding. And those are Responsible Consumption and Production, Climate Action and Life on Land.

Ambitious Reduction Targets for CO₂

These are also reflected, if you think about the ambitious reduction targets for CO₂ that we have set. And I'll talk about the science-based targets that we as the first forest company announced and communicated. And those are externally approved science-based targets. Our target is to reduce 31%, and last quarter we were at 24% so we are in a good way to deliver here also.

Impacting Funding and Reporting*Revolving credit facility*

And these are also reflected in our financing and treasury activities, which is of course natural if you walk your talk. And last year when we put in place revolving credit facility, we have there a green aspect linking to these science-based targets. And in the pricing grid of the

revolving credit facility, there is a component that when and if we reach the targets, there will be a reduction of the costs of the facility.

Green Bond Framework

We have also, before summer this year, set in place a Green Bond Framework, so we are ready to launch green bonds as soon and when we see it necessary. One opportunity could be when we are finalizing this Bergvik Skog ownership restructuring, so we are conscious that that could be one opportunity to use – use green bonds.

Sustainable finance strategy

And when it comes to sustainable finance strategy, it's not enough that we are sustainable. We also expect that our partners, when it comes to funding and working – that is, for instance, banks and capital market fund partners – are also having a sustainable agenda and follow the same path.

Climate-related financial disclosure and integrated reporting

And we also believe that you need to be transparent when it comes to sustainability. That's why we are supporting and working on financial disclosures as well as integrated reporting that is the key. And if you look at our Interim Report, for instance, it's already past five years we have a separate statement for sustainability section topics and that way opening what we are doing. And you can follow that we are delivering on our promises and targets, just as one example.

Delivering Performance

So to summarize how we are moving and delivering performance, so its digitalization, automation to knock out costs from the system; it is ensuring that investment projects that we are approving are meeting the targets; and that is linking sustainable profitable growth through robust asset management. Thank you.

Q&A

Ulla Paajanen: Thank you Seppo, and now we are ready for Seppo's questions. Okay, so I think now Harri please, go ahead.

Harri Taittonen: Yes, thank you Seppo; Harri Taittonen, Nordea. You mentioned about they're going to have the strict sort of policy on the sort of – when deciding upon investments. Could you also relate it to acquisitions? I mean is there some sort of a strict policy, or how would you look at acquisitions in – in this context?

Seppo Parvi: I think it's very simple. We have set return on capital, employed targets, and whatever we do must be creating additional value through that. It's a very simple – simple way to measure it, but I think we are – I am very positive that over years now that we have had these targets – also internally clearly communicated; it's also going through in the organization. And people clearly understand that those are the drivers when it comes to bringing us a proposal of capital expenditure acquisitions; it's very straightforward and simple in that sense.

Harri Taittonen: Yeah, it makes sense. Is there some sort of timeframe that you are attaching to this sort of – say there is an investment which might be creating EBIT loss in the

first year. And then – sort of what would be a kind of typical time when you measure whether the investment has met with the sort of criteria?

Seppo Parvi: Yeah, absolutely, because in many cases when you start up a major project, it's part of the calculation –

Harri Taittonen: Sure.

Seppo Parvi: – that you are going to make losses the first couple of years in some cases. Sometimes it goes fast; it depends case by case, so we take that into account. And in some cases, we allow two to three years before it starts to deliver, or even longer if there's a bigger, let's say, amount invested in infrastructure as well, so you need to take it into account. And remember the long-term value, our long-term use is of the assets. We are in a capital-intensive business and the investments are up and running for 50 to 100 years, not just five years.

Harri Taittonen: Absolutely.

Seppo Parvi: So that's something that we've taken into account, absolutely.

Harri Taittonen: Sure, okay, thank you.

Ulla Paajanen: Okay, yes, Mikko.

Mikko Ervasti (SEB): Thanks, Mikko Ervasti, SEB. Regarding the financial targets traffic lights, now they're mostly on green. Why didn't you want to go back to yellow and red again today by lifting them?

Seppo Parvi: Of course, I mean when we set the targets four years ago, they were – we were on red and green – and yellow with most of them. And we already then said that they are ambitious, and now we are delivering. Of course it is something to be considered, but you have to remember it's just very recently that we have been starting to – to meet and exceed the targets. So we'll take that into account and – and take a longer term on this.

Mikko Ervasti: Okay, thanks.

Seppo Parvi: But just – I just want to remind you that we have changed some of the targets. A year ago, we increased the target for Wood Products from 18% to 20%, and when it comes to our debt ratios, we also did some changes this summer. So it is a living document, and we do – do a bit see where we are, reflect how we see the future also going forward.

Ulla Paajanen: Okay, Markku.

Markku Jarvinen: Thank you. You show quite a big value gap between the market value of the Bergvik asset and sort of IFRS value. Why do you think that is, and what do you think is the potential for you to close that value gap? And which do you think is sort of the value that a shareholder should care about?

Seppo Parvi: Yeah, it's a good question, and I was expecting to get that eventually in that table. Of course, you have to remember first of all that the external data is often guided on the smaller sized deals compared to fair valuation that we are doing for the whole asset base that we have in Bergvik Skog as an example, or elsewhere. And quite often if you look at the actual land prices, they have been higher than – than based on the valuation all along.

When it comes then to how to create more value out of the assets, I think, for in the case of Bergvik Skog, what we believe is that we can revisit the harvesting plans, be more efficient in harvesting, also in – focus more and improve the forest management to get more growth out of the forest and doing it that way. And also separating that more clearly in our figures and explain to you what we are doing and how we are creating the value from the forest base, I think you can also better understand and capture the opportunity there.

Ulla Paajanen: Okay, and then we have Lars here in the front.

Lars Kjellberg: Just coming back to Bergvik, changing the structure of the ownership from being an equity investment to consolidated, how would that shape or change the way you operate that asset? And just the point you just mentioned: how to change, you know, your harvesting schedules, etc. Will that really change anything or it's just going to be on fully on you balance sheet, or how do you see that?

Seppo Parvi: Well, of course the asset will be fully on the balance sheet, but what is changing then is that as we have the direct ownership, it is fully in our control and hands: how we are running the forestry operations there when it comes to – the same as – a good example is harvesting opportunities. We think that we can increase the harvesting, and that way get more cash flow, and improve the self-sufficiency rates as well. And in the longer term, of course, it's not that you should not over-harvest, so then we can also work more on how we can increase the growth of the forest in the areas where – where we are harvesting and where the Bergvik Skog lands is. But I think we can come more into details once we are ready with the deal. Like Karl said, we are working on the – on the details, and they'll come out as soon as we are ready.

Lars Kjellberg: And just a question on, you know, you focus on return on capital employed, of course, and you – I think you said, when you announced the deal, that will be reduced by about 100 bps. How should investors think about that versus a very high return on operating capital investment in, for example, in Paper Board where you have 20% plus?

Seppo Parvi: Yeah, but this is, of course, the initial effect – I think it was half a percentage point, but anyway it has a negative effect when it comes in. But as I said, we believe that by running it more efficiently, we can close the gap that is coming initially. And also I think the key and important thing here is that – like I had also in one of my slides – that this a strategic asset giving us a competitive advantage in bioeconomy. And we have been all the time a true believer in the value of the forest and importance of forest ownership.

I remember back – it was four years ago – when we increased on ownership in Bergvik Skog. Many people said, 'Are you crazy? Why do you need to own forest that you can – source it?' I think already the past year has shown that it was our experience it was easier to manage the harvest – challenging harvesting conditions when it was your own land, compared to harvesting done by sub-contractors or ourselves on someone else's land. So there are many operational benefits as well in owning the forest, as well as the value creation that we can create for the shareholders by owning it truly, directly and managing it better and better. So we believe that after the initial negative effect, it will be value creative; we wouldn't be doing it otherwise.

Ulla Paajanen: Okay, I think we need to conclude now, and there are more opportunities during the breakout sessions for further questions. But thank you, Seppo.

Seppo Parvi: Thank you.

Ulla Paajanen: And before we conclude today, and we will say goodbye to our webcast audience, I want to give some instructions for practicalities going forward here. And we will, after Karl's concluding remarks here, have a break for coffee. And we will start with the breakout sessions at three o'clock. And now, look at the color of your badge, because you – we are divided according to that to different groups. The group gray will stay – will come back to this room for their session, and the two other rooms are just opposite of the – in the corridor. And there will be a color coding – which color is in which room. So after the coffee break at three o'clock, please come to these breakout session rooms, and the management will circulate from one room to another.

Then immediately after the breakout sessions, we will head to the top floor of this hotel for drinks. And the elevators – all right, Dennis[?], hold your horses. So the elevator is actually in the other end of the hotel, and you go to the top floor. Then, it's not only going to be drinks, I must say; it's going to be about Wood City, so Jari will continue with the great presentation about how – how it goes about and what is the future outlook. And since it's going to be a dark November night, we have 'lighted' the building for all of us to see it in a more detailed manner.

Good, so I think this is hopefully clear to everyone now and please, Karl.

Closing Comments

Karl-Henrik Sundström

Chief Executive Officer

Thank you, Ulla. So as a conclusion and concluding remarks, I'm very happy to see that so many of you came to visit us here in Helsinki. And I feel very excited about having all five divisions presenting, showing their potential in the value creation based on a raw material that is renewable, reusable and fossil-free.

I think we have demonstrated today that if we do these things right going forward, there is an enormous potential for Stora Enso. But it's also based very much on our innovation and the realization agenda, which means that we are changing as a company. And the journey that we started a couple of years ago, we have had some traction so far, but we need to continue; this is a long-term journey.

So thank you very much for coming here.

[END OF TRANSCRIPT]