



# **Capital Markets Day 2019**

Thursday, 19<sup>th</sup> September 2019

## **Welcome**

Ulla Paajanen

*SVP, Head of Investor Relations*

Good afternoon everyone and welcome to the Stora Enso Forest and Wood Products Investor Day. I am Ulla Paajanen, Head of Investor Relations.

### **Today's Agenda**

We have this year a bit more focused investor day and we are talking about our latest acquisition, namely increasing our forest holdings here in Sweden. Our top management here will talk about the strategic rationale of this deal and why we did it. Then we will get the internal customer point of view. Our Head of Wood Products division, Jari Suominen, will talk about how this integrated forest will help his business.

After that we get the perspective of the man from the forest, namely Jorma Länsitalo. We will talk about the practical and tactical integration of the forest to the Nordic wood supply. And then the CFO, Seppo Parvi, will explain to you how we are starting to record the new division from the beginning of next year.

Now our CEO, Karl Sundström, will talk about Stora Enso's role in bioeconomy. Karl, please.

## **Taking The Lead In The Bioeconomy**

Karl-Henrik Sundström

*CEO*

### **We Are Leading the Way In The Growing Bioeconomy**

Thank you, Ulla. Thank you all for coming here. It is a pleasure. And I will go through some of the rationales of the bioeconomy touching lightly upon the Bergvik restructuring. And then we end up with a Q&A session after that. But do not ask all the questions, because a lot of the questions you will have will be answered by Jari, and Jorma, and by Seppo. So you can take it light questions with me please.

So this is happening all over the world right now: we are leaving the old fossil-based economy and we are moving into a bioeconomy. And the bioeconomy will be based on circular economy but also about renewable material. And being a company working with a raw material that is renewable, reusable and fossil free means actually that we are in a very good position. And here is where Stora Enso wants to lead the new way into the bioeconomy.

### **Our Business Is A Net Contributor to Prevent Global Warming**

Just as a starting point I would like to show you that we are a net contributor to an adapted climate. So we have forest now. We generate additional capture of about three million tons of CO<sub>2</sub>. We are actually using 11 in the whole production in and outbound logistics. But the most important thing is that we are actually substituting 24 million tons of fossil-based materials. That is basically calculated in a very simple way for everything except wood products. Because in wood product we know how much we capture but when it comes to all other grades based on fibre, we actually only use the energy value.

But being alone in this position, using the standing rate at the moment for green certificates at €25 per ton. This is a potential income going forward for our industry and for Stora Enso: about €325 million. This is not how the world looks right now but this is how the world is going.

### **25% Of Plastics in Packaging Can Be Replaced Today...**

Already today with existing packaging technologies you can actually replace about 25% of the fossil-based materials in the packaging industry. And we see an increasing demand today.

### **... And Eu Single Use Plastic Directive Is A Huge Opportunity**

And one of the reasons for this increasing demand is the implementation of the single use plastic. This is the fastest legislation ever turned round in Europe and it will be in the national legislation in 2021. This will drive an increased use and give additional possibilities for us to almost double the sales in food service board.

This will only be possible also through innovation. And that is why the innovation agenda has been so high in Stora Enso: because it is an enormous potential.

### **Accelerating the Replacement Of Fossil-Based Materials**

While being here I would also like to make a little bit of a promotion: you might wonder what this is. This is graphite which is the main component in the modern batteries. But this is made from lignin at very competitive prices. That is the reason we are investing €10 million in a pilot plant in Sunila to drive this even further. And for those who want to see it in real life I have it here. That is a prototype. Today, most of the graphite is either mined or being cooked out of the lowest quality of crude oil. And if we believe in electrifications we need to make sure that the batteries of the future are actually green. Otherwise we will not become into the bioeconomy.

And this is an area where I think the forest industry Stora Enso has a huge potential going forward.

### **Oulu Paper Mill Is Converting to Packaging Board Reducing Our Paper Capacity By 20%**

The other part I would like to touch upon is actually our investments in Oulu. And you probably have some questions about the CAPEX. I already got that before the meeting. So what we basically are doing, we are accelerating the investment in Oulu. And the reason for that is that obviously, wood-free coated is being more challenged than ever before and we need to get out of that as fast as possible. That is why we are having a higher CAPEX. But save those questions for Seppo and he will go through it.

But this is a grade kraftliner which is extremely interesting. It is over 30 million tons per year and it is growing with a volume by year for around 700,000. So we with our new 450,000 ton capacity, is less than one year of growth. It is a product that is global, because this is the fundament for trade, especially when you are trading fruits and vegetables, because it is a pure virgin product which means that you can put a lot of food related things within it.

I know there is a competitor which is investing, which is about 250,000 tons if I am right, but they are not the same timing. But all in all, that is the total investment of a year's growth in this market which we believe in.

**Demand for All Pulp Grades Is Growing By 2%**

And it would not be a capital markets day with all you guys here if I would not talk about the pulp market. So basically what I am trying to say with this slide is basically, pulp will continue to grow. All pulp end segments are growing, with the exception of graphical paper.

The other part of it is, if you look on the average capacity coming per year until 2024, including the newly announced UPM mill, it is actually less than we had in the ten last year. That has been 1.6 million tons. And today going forward, it looks like it is going to be 1 million ton. Because even if you take a decision today it is very hard to get it ramped up and running and constructed before 2024.

**Our Portfolio Is Further Strengthened with Integrated Forest Assets**

So as this is a backdrop looking into our portfolio, we are sitting on a very good portfolio. We have a very good position in food packing, in liquid, in consumer board. We are strengthening our position within the packaging solutions, especially with the new Oulu mill. In biomaterials we have a very wide, and we are moving more and more into special pulps such as Skutskär fully fluff and Enocell being fully dissolving pulp. Which links very well to our cooperation with H&M and Ikea in the treated textile project.

Wood Products I will not mention so much but here we have a number one position in Europe when it comes to building materials based on wood. We have the fourth position in the world. But in the high growth segment of cross laminated timber, we are by far the number one in the world.

Paper is a declining market. It is probably one of my least problems as a CEO. They know what to do, and with the conversion of Oulu, we will take away around 20% of the paper capacity. But it is also 20% of the most complex, because you have a lot of sheeting in the wood free coated. So complexity for remaining paper will be a lot easier.

And then as we talked about today we are creating as of 1<sup>st</sup> January 2020, a forest division. This is fairly big because what we are doing is basically taking out all the forest related and wood supply related items out of segment 'other' which means that will increase our transparency. We are an extremely big supplier and purchaser of wood and now with restructuring of our [inaudible] also big forest owners.

**Forestry Management Is A Core Part of Our Sustainable Business...**

This is a forest which is growing by 4% per year. This is a forest where we believe we can increase harvesting by 10-15%, and we are already starting it and Jorma will talk more about it. We are talking about 0.5 million cubes additional, that we are already ramping up. And Jorma will also talk about the possibility of driving more yields in the standing stock by using more innovation. This makes us the second biggest private forest owners in the world, with €3.6 billion of biological assets.

What is known for us now, and what Jorma will cover in that presentation, is we now are going from being purely a wood supply organisation to more of a forest management. That is where we believe we have a 10%+ possibility of increasing the yield in our own forest which is to a great extent what we are having in Bergvik. This will give us a stronger competitive position because our flexibility and agility will increase in a fully integrated wood supply, especially in middle Sweden.

The other thing that is important to remember, which Seppo will talk about later on, is that basically in the middle of Sweden, which is all mills except Nymölla and Hylte, 70% of the wood supply is coming from Bergvik. And that is one of the reasons that we needed to get this back inside the company, on top of being a very important asset for the future. Because if you believe in the bioeconomy, you need to make sure you have strong control of the forest.

### **...With Total CAGR Potential Of 6-8% Per Year**

So looking into the future we believe that, excluding paper, which is declining business, we have growth potentials in all divisions. And Consumer Board is 2-4% going forward. Packaging Solutions is the highest growing by 7-8%; that is very much driven by the new Oulu investment. Biomaterials, 3-5%, partly because of repositioning ourselves in the pulp market, going away from softwood pulp to more specialised pulp and other substitutes that you can get like lignin, etc. And then wood products 6-8% growth. That is what Jari will cover.

So total, excluding paper, 6-8%, which I think is an interesting proposition for the future.

### **Our Formula for Success Continues To Deliver Results**

So our formula, that we have been playing for the last number of years, will continue. We have sustainable, profitable growth, growing faster than the rest of the market in the segment that we address. Strong cash generation: Seppo will come back to that. CAPEX of €3.4 billion, or on average €680. That is including the €800-850 for next year which we are temporarily increasing to be able to do the Oulu transformation a lot faster than anticipated.

Dividend: 50% of EPS, and making sure that we are below net debt to EBITDA two times. We are temporarily over it now with reconstruction of the Bergvik.

So before I open up for Q&A, control of forest assets is a competitive advantage in the bioeconomy.

## **Q&A**

**Oskar Lindström (Danske Bank):** A number of questions. I think the first one here you mentioned was, paper was the least of your problems. What is your main problem or main concern? Please be as specific as possible.

**Karl-Henrik Sundström:** One of your biggest concerns when you are changing a company is to make a company move in a different speed. We have worked a lot on trying to differentiate ourselves by being more innovative than our customers and our competitors. That is a challenge. How do you continuously make your organisation the most innovative and the most nimble? That is always a challenge because you can never change an organisation faster than they are willing to follow you.

**Oskar Lindström:** And on a scale from zero to 100% implementation where are you now?

**Karl-Henrik Sundström:** So my ambition is 100% and I am probably getting 75-80%.

**Oskar Lindström:** Maybe just a last question. One of the last slides was showing your ambition of 6-8% growth.

**Karl-Henrik Sundström:** Excluding paper.

**Oskar Lindström:** Excluding paper.

**Karl-Henrik Sundström:** Yes.

**Oskar Lindström:** That is a high speed of change. Will you need to significantly increase CAPEX to sustain that type of growth?

**Karl-Henrik Sundström:** No. That is within the average of €680 per year.

**Oskar Lindström:** Wow. Alright.

**Karl-Henrik Sundström:** You have to remember, new products and services when we started in 2015 was 1.5% of total sales. When we ended last year it was actually 9%. This year we will go down a little bit but I believe we will be around 15% on new products and services in 2024. And the trick is here to have a number of platforms such as the liquid platform, the CUK platforms, where you can turn into new products on a very short. But you also need additional platforms, and that is what we are investing in: MFC, the lignin portfolio. And Jari will cover it when he talks about biocomposites. You will get examples. Formed fibre unit we are setting up in Hylte as well. It is a number of initiatives.

**Oskar Lindström:** Right. Thank you.

**Karl-Henrik Sundström:** Thank you.

**Linus Larsson (Enskilda Securities):** Now that you have reconsolidated the Swedish forestland, I wonder how that will change your behaviour in practice. And you did mention the volume potential and that will have a positive impact on the EBITDA figures that you presented yesterday I assume.

**Karl-Henrik Sundström:** I will be very clear. We presented with previous management, because it is 2018. We acquired it this year. Right? So this is if you take what was produced in Bergvik under a different management. Obviously one of the reasons why we bought it was to secure, but also that we saw additional potentials. So this is the starting point.

**Linus Larsson:** Right. Got you. Pricing, maybe the answer might be somewhat different. If you look at wood prices in what has been the Bergvik area, now maybe the Stora Enso area, wood prices are lower than areas south of that area or even north of that area. Will that in any way change or will you continue to run your business in the market like you have been running it over the past say 15 years?

**Karl-Henrik Sundström:** The starting point is basically the same prices as we had with Bergvik. We like that structure and it is not strange because we are such a big taker of forest in that area, and I think that is the way that we do it. So it is market based but it is based on the market where we are a big player.

**Linus Larsson:** Thank you. And then just finally, also with this strengthened backward integration in mind, how does that affect your thinking in the downstream? Are we more likely to see investments in nearby wood consuming operations? Does this play into the downstream strategy as well?

**Karl-Henrik Sundström:** I think it is a historical reason. We should never have sold off Bergvik in the first place. Because that was part of our structure historically. Now we are taking Bergvik back mostly because that is for all the mills 70% of the wood supply. Into Tornator which is where we own 41%, that is about 10% of our wood supply in Finland. And there are not a lot of these big pieces hanging around, and frankly I do not at the moment have

the balance sheet to take more on. And Jorma will talk about that because in the other market we need to work with very long-term relationships with the forest owners to be able to be nimble and to be able to offer a lot more than just a good price. Because today most forest owners do not live in the forest areas of Finland and Sweden: they live in Stockholm and Helsinki. So it is a different service offering, and Jorma will cover that.

**Sindre Sørbye (Arctic Fund Management):** interesting to see your views on growth rates during the next five years, more specifically on what we can call 'emerging products' like lignin, MFC, wood composite, sugars and so forth. In absolute numbers, looking five years ahead, we should actually see quite some top-line effect from that. What would you think the potential to be?

**Karl-Henrik Sundström:** Jari will talk about 200 million in biocomposites. I think we will have 50-80 million of lignin replacement or phenol replacement. MFC we have launched already in 2015 and we have launched in more and more products but as a source reduction. The next level of MFC will go into areas such as being a barrier, and generation first, we are actually starting to produce at the end of this year, which is basically grease barrier in Imatra. When it comes to binders, that is probably coming out in the next two years and then if you look upon formed fibre, we are talking about 100-150 in five years so it is substantial.

**Sindra Serbay:** Yes, so it means it could get up to much more than 500 million in five years.

**Karl-Henrik Sundström:** Yes. Probably in the year 2024, yes, it could be 500.

**Sindra Serbay:** yes, so that would be 5% growth alone. Thank you.

**Markku Järvinen (Handelsbanken):** Thank you. I just wanted to ask: this scenario with the single use plastics of, let's say, 50% growth, was it, for food service board?

**Karl-Henrik Sundström:** That is the potential.

**Markku Järvinen:** But you also show your current business in that area disappearing. How should we look at liquid packaging board in that universe?

**Karl-Henrik Sundström:** That is not in that. Liquid packaging board over time will replace barriers from being fossil based to non-fossil based. That is part of what we are trying to achieve in MFC in the 2024 area. The second one is recirculation of liquid packaging board is now being implemented outside the Nordics and going into more parts of Europe, which has been a problem.

**Markku Järvinen:** So where do you see our current liquid packaging board business being in 2030?

**Karl-Henrik Sundström:** In 2030 it is probably going to have a growth of 2-4% going forward. That is what I believe.

**Gustaf Schwerin (Pareto Securities AB):** Thank you. Two questions from my side, firstly on bringing back Bergvik into your own books. Other than just increasing potentially your harvesting levels, what do you think you can do with profitability in the coming years?

**Karl-Henrik Sundström:** So the profitability to be very clear is under previous management. And if you look, because you cannot see that, only at Bergvik, it is about the same as some of the Swedish competitors. But what you have to understand is on top of that we are taking in all the wood supply from the Baltics, Russia, Finland and Sweden. So you cannot compare our

Forest division as it has been presented with the ones that you see in Sweden, or our two competitors in Sweden. Very different. Because they have one Bergvik; we have one of the biggest sourcing organisations of wood in this area of the world. So profitability will obviously be better.

**Gustaf Schwerin:** Okay. Fair enough. Then secondly, you mention potential growth in new business areas. Roughly what kind of margins do you foresee in the next five years in this area?

**Karl-Henrik Sundström:** So when it comes to new products and services, you only let new products and services out when they have a better margin, right? You will not release a new product that has lower margin, so I think margins will continue to tick up.

**Gustaf Schwerin:** I mean, seeing as these are pretty much by-products, the theoretical margins should be very high I guess.

**Karl-Henrik Sundström:** Yes. But also in the early days when volumes are small they are going to be a fantastic good. But then after a while competition will come in. So formed fibre is going to be high; biocomposites is going to be high. Then competition takes. We just need to be fast, and that is what my first question was: to be more nimble and faster than our competitors. And that is the only way how you stay ahead of the curve.

**Robin Santavirta (Carnegie Investment Bank AB, Finland Branch):** Thank you. Going back to the previous question on the R&D that you are spending, I guess you are spending some €150 million a year on innovation, which is more than most of your competitors.

**Karl-Henrik Sundström:** More than double most of our competitors.

**Robin Santavirta:** Exactly. Exactly. What is the investment hurdle rate for that? Because obviously it is interesting entities you are working with and the potential is there but do you not feel that you risk investing several years? €150 million is much. Five years of that is several hundred million euros. Do you fear that the return will not be there? It will come late? Can you be a bit specific on the hurdle rate that you expect?

**Karl-Henrik Sundström:** Obviously when we start a project we are trying to figure out the margin of it and usually we have to go on the highest margins. So some of them we have to close down because we will fail, but I do believe that we would never have reached 8% new products and services in 2018 without that money. And if that is the case, that means that you are getting two things: you are getting new products, with a higher margin than existing, plus maybe the most important, you get time monopoly with your customer. Because copying what is a later invention means that you need to use price. You can either fight in that and then you start with a lower margin to start with, or you lead and have a higher margin. I would rather lead and have a higher margin. But obviously it is in a way also a substitution of CAPEX. In that sense it is not a lot of money because for €150 you do not get a lot at the pulp mill. Right?

**Robin Santavirta:** And then another if I may. A bit of a tough question I guess for you.

**Karl-Henrik Sundström:** Tough? There is nothing tough.

**Robin Santavirta:** During your time as a CEO, by far the largest project you did was Beihai. It was not decided by you.

**Karl-Henrik Sundström:** No.

**Robin Santavirta:** It was decided by somebody else before your time as a CEO. The ramp up has been tough and the profitability development has been a bit disappointing. What is the current state? Is there anything that should have been done differently and how should we expect the outlook? You have invested more than €1 billion in Beihai still.

**Karl-Henrik Sundström:** So the mill including the PET coating is €830, and then on top of that you have the land leases, right? I think sometimes you guys have a very short time horizon. I think the verdicts of Beihai will be in ten years.

**Robin Santavirta:** For sure.

**Karl-Henrik Sundström:** So I feel good because I think it is a very good place to be in and it is very competitive. It is actually one of the fastest ramps up of liquid packaging in history. Last time we ramped up I think it took six years to seven years and we almost went broke on the site. So I think we have to be very humble ramping up mills.

I was in Uruguay about three weeks ago. It is an extremely good mill right now but I tell you, I had a lot of sleepless nights when it was ramping up in 2014. We had the same issue but a lot smaller in Varkaus. Started well, terrible first and second quarter, and then back on it. We have to be a little bit long term and I will tell you, in ten years, the verdict will come on Beihai. I am positive.

**Robin Santavirta:** Good. Thank you.

**Johannes Grunselius (Kepler Cheuvreux):** Yes, one. Curious if you have thought about, done internal analysis, and so forth, on climate changes, and how that could affect your Swedish forestland and how you perceive risk for storms. You have the famous insects now going on in the south of Sweden at least, yes. So if you can touch upon that please, it would be interesting.

**Karl-Henrik Sundström:** So obviously for us and for most people the biggest problem is climate change. We might actually benefit in the short run with higher rotation times but in the longer run we might have bugs coming up. They are not really in our areas yet but the bug, we see it in southern Finland, we see it in Sweden. We have seen it in Central Europe for a while. So that is one.

We have more unpredictable weather which is a problem, which is one of the areas where we are working constantly. And we saw that already in 2018 where we had basically a very warm winter in southern Finland which stopped harvesting, and we had a challenge on that. In Sweden where we have our forests it was too much snow: we could not get it out.

So this is something where we actually adjusted already in a way a wood supply for this year. We will go more for flexibility, and in a way it is about agility. Jorma will talk about that. But another area is, we need to invest more in innovation on new seedlings to make sure we can phase in more breeds of trees that are more resistant to this. We are one of the leaders here. So that is very important, a very good question.

**Johannes Grunselius:** But if I am hearing you right the issue right now with these spruce beetles, that is under good control from your side?

**Karl-Henrik Sundström:** Where we are, we have been using a lot of technology to detect it early. Not only eyes: we are using drones to see them. And also, when it happens, you actually cut down forest a lot faster. The wood prices come down, so it is a positive in the short run,

but it is a negative in the long run. Which means that you need now to have species that are more resistant and you need to put money in the research in the nurseries. And that we are doing.

## **Leading the Change in Construction**

Jari Suominen

*EVP, Wood Products*

Ladies and gentlemen, I would like to start with some basic facts regarding Stora Enso's Wood Products.

### **The Leading Provider Of Sustainable Building Solutions**

Like Karl-Henrik said, we are the biggest in Europe and we are number four globally. And in left side, you can see that we are running 20 operational units in ten different countries, and I would like to highlight that all these units are close to best forest in Europe.

Further on, we are developing wooden building component units and in cross-laminated timber (CLT) we are the biggest globally. Then moving to customers, we have a unique position. Our people are serving our customers in each continent except Latin America and Antarctic. We have close to 3,000 happy customers and those customers are served with wood that has full traceability.

### **The Leading Provider Of Innovative Wood-Based Solutions**

Last time in capital market days I was explaining you how we have been delivering our promises, especially when looking at the financial targets. Further on I explained you our progress in our huge transformation from traditional classic sawn produce to provider of innovative wood-based solutions. This strategy still valid, but in order to grow and in order to accelerate the growth we have identified three success factors we need to focus and we need to develop in order to make it happen.

Those three areas are: sustainability. We need to take the advantage of our sustainable position. Secondly, we need to be disruptive. We need to dare to challenge the status quo in construction industry. And thirdly, we need to be agile. Our transformation is continuing, world is changing, and we need access to that continuously. This leads me to our main business driver, and that is construction.

### **There Is A Pressure On The Construction Market To Change...**

And this is industry that need to change, and we in Stora Enso, we do not want to be just part of the change; we want to lead the change. This industry is highly resource intensive. Construction materials are causing 11% of global carbon dioxide emissions: 11%. It is one of the weakest developed industries and if we are looking technology is also weakly developed.

### **Buildings Of The Future Will Be Cheaper And More Sustainable**

Then comes the question, how are we going to do this? And I will start with our innovations. In right side in this picture you can see CLT building element. We have similar kind of solutions from LVL construction beam and these are components which will change the industry. These are faster to build; these are light, so you need even give times less trucks into European

capital, if you build high rise building from wood. Construction places will be quiet, safe. There is overall nicer atmosphere. And what is also highly important is the fact that our product is natural, so it is healthy. And this is the reason why many, many schools, kindergartens are now built from wood, not just in Nordics but overall in Europe.

Dear ladies and gentlemen I would like to proudly present you a video which is about our newest building concept for offices, and all these proof points I was showing here, you will see from the video. So please show the video.

[VIDEO]

I hope you liked it. You were the first audience seeing it and this will obviously launch in a couple of weeks for architects and engineers in London.

### **Geologen Trummen Strand In Växjö, Sweden**

I will still stay with couple of examples. This is building block from Växjö, Sweden. We are getting always the question that, 'For your growth, will you have enough raw material?' And our answer is that, 'Yes, we do.' Our raw material is renewable and our products are reusable. What is the beauty is that this total building block will grow back in Swedish forest in 17 minutes. When comparing to competing materials, we can save up to 75% in carbon emissions, carbon footprint.

This is the example which is showing that how our sustainable positioning is highly important for us, all the proof points are very important for us as well as our position in circular economy.

### **Üstra-Siedlung In Hannover, Germany**

I will still continue in one example. This is building block in Germany in Hannover. There are 140 apartments and one kindergarten. This was built by German logistic company. One of their main decision factor was ecology.

Storage impact of this building is equalling of driving 40 million kilometres by truck, so 40 million kilometres. This kind of decision factors will be there, what we are seeing continuously more and more.

### **We Are Growing By Disrupting The Value Chain**

But we do not want to stay just as a efficient component provider or ecological material provider, we want to reach more. We want to lead the change, and we want to reset the total wood and construction value chain. This is what I would like to move now on.

#### *Traditional construction chain*

Left side, you can see the existing value chain, existing ecosystem. It is highly sub-optimised. It is value-disruptive. In a matter of fact, it is complete mess, at the moment. This is what we want to change.

#### *End-to-end construction value chain*

We want to develop end-to-end process, starting from architects and engineers we will develop with our partners, which are also including start-up companies. We are developing new platform which will be based on digitalised solutions. These digitalised solutions are fitting perfectly to our highly prefabricated products.

## **Providing A Digital Platform Connecting Innovative Services for Wood-Based Construction**

Then, the question is that, 'What does this digitalisation mean?' I will move that – to that next. Here, you can see – this is highly simplified – but here, you can see the wooden construction value chain.

### *Design and engineering: intelligent, collaborative design and visualisation*

We start from design and engineering. We continue in construction. Finally, it comes to operation and demolition of the building. Then, looking the digitalisation developments. We are developing 3D modelling tools called Building Information Modelling. Our products are included are included there. This is increasing that phase – engineering and design phase – efficiency hugely.

### *Construction: smart production and construction*

These models are connected to our factories. Then, when we are sending the products from the factories, we are using RFID and sensor technology so we can follow the delivery and even not just location, but also what is the condition of delivery, from moisture, temperature perspective and so on.

Then, when products are entering into construction phase, we have applications available and those are already in use in our partner carpenters. They can see, based on those application, what is exact location for each component.

### *Operations: big data services from building components with sensor technology*

Then, we move into operation phase. Sensor technology is fitting very well to wooden components. With those data, we can help facility owners, maintenance companies with information what is the temperature, moisture, carbon dioxide situation in the building.

Last but not least, finally, when we are end-of-lifetime. We have considered already from the beginning in design phase how, as easy as possible, to deinstall our components and reuse them. This is roughly, very simplified way how we are getting to digitalise that.

There, middle, you can see the big picture of our mill. There is also a second digitalised value chain that is from our mill to forest. But I will not go there into details; Jorma will come back to that. Those who will join us tomorrow, we will get deep dive on that when we go to forest and see what we are going to do with our beautiful material in our mills.

## **Our Agility Will Be a Gamechanger**

### *Speed to move the innovation pipeline and act on early trends*

This leads me to last area: agility. This is area which is highly important for us. World is changing, we need to change according to that. Speed, like [inaudible] also, where speed is one of the main factors. But one way to reach the speed is to be proactive, see the future trend early enough.

### *Harmonisation to allow automatisisation*

Further, we want to automatise our operations and improve the efficiency. But this automatisisation, we are getting feedback that our industry is weakly developed, if we are looking technology perspective. My answer is that, 'Yes, we are weakly developed. But we do not see that as a threat, we see that as an opportunity as it is so easy to copy from other industries.'

*New capabilities for successful business transformation*

Then, new capabilities, we need to develop continuously. We are moving in our transformation and we need to attract new competencies we need to adjust our processes. This is the agility we have been developing.

**We Are Delivering Profitable Growth...**

Then, moving a bit to track record. When looking the sales development, we are being growing during the past years some 3-4%. If we take into account the fact that we will – we stopped trading in our business and we would take that into account, so we are speaking about some 4-5% growth. In margins, we have close to doubled our EBIT% and we have reached our return on capital targets.

When you are looking this picture, one main focus areas is that how not just to grow, but how to accelerate the growth. This is where we are working, and I would like now to show you how we are going to do it.

**...With The Target To Grow Profitable 6% To 8% Per Annum Through Innovative Wood-Based Solutions***Building components and solutions*

The area where our focus today was building component and solutions. There, we see potential up to €400 million in five next years.

*Competitive classic paned*

Then, we have our traditional Classic Sawn business. There, we will have also some growth. But that is mostly based on new service models.

*Biocomposites*

Then, where already Karl also referred, biocomposite. There, we see – there, we will grow some – up to €200 million in next five years. This is the product where we have new innovations and, first time, we can cost-competitive. What I would like to highlight – cost-competitive. We can replace fossil materials with renewable material different kind of plastic applications.

Last but not least, we will focus to develop and increase the share of new products in our sales and portfolio. Last year, it was 4%. This year, it will be somewhere between 6% and 7%. Then, our target is 15%, 2024. When we count this all together, we come to growth of up to 8%.

**The Leading Provider of Wood-Based Solutions***Qualities needed to be a winner in this industry: sustainable, disruptive, and agile*

Dear ladies and gentlemen, I will now move towards conclusions of my presentation. How we believe is the winner in this industry will be the one who dares to be sustainable and take the advantage of sustainable position. The one who dares to be disruptive, challenge the status quo in construction industry. The one who dares to be agile, continuously adjust in the changing environment.

*Drivers to achieve growth: new innovative solutions, end-to-end transparent value chain, and digitalisation*

I hope you got good understanding how we are going to do it. First of all, with our new innovation solutions, we can enter into markets earlier dominated by concrete and steel. Then, we want to develop end-to-end transparent value chain in wood and construction industry together with our partners, with developing the platform. Finally, that based on digitalisation. Agility, we will develop, based on our new capabilities we are continuously adjusting. Thank you.

## Q&A

**Antti Koskivuori (Danske Bank):** About the disruption in the construction industry, you mentioned that building out of wood is faster, it is cost-competitive, and it is definitely more sustainable. What is the kind of main things that is keeping the construction industry from changing from concrete to wooden products, at the moment? What is holding it back?

**Jari Suominen:** First of all, I would say that nothing is holding. In many markets, we are already starting the high increase. Our growth rates are high, if you look in these products. When we are entering into new markets, there we have a challenge – what I showed – that it is not enough that we will play the new game. We need to have the total ecosystem with us.

It takes all – always some years to develop each new market. But when it is developed, then the growth is high. My answer is that new market development takes some time, but when we are there, nothing is holding up. There, we have good examples already.

**Antti Koskivuori:** You do not need any regulatory actions to promote wooden product or building out of wood?

**Jari Suominen:** Basically, if you mean that regulations should help us to get wood up, we do not need that. In certain cases, what we wish is that we get the same chances as other materials. There is lot of questions: 'Is wood fire-safe?' These products are from massive wood and those are higher – fire-safe. From this perspective, there are – in certain areas, regulations are coming a bit behind. But those are getting into correct direction. We are confident we will get there.

**Antti Koskivuori:** All right. Thank you.

**Annareetta Lumme-Timonen (Solidium):** Hello. You just described your – the growth targets getting from building components and solutions, €300-€400 million more per year. Can you give some kind of an idea how many kind of these kind of bigger office buildings it means? Do you also feel – are we talking about tens or hundreds or how much?

**Jari Suominen:** So far, we have had 15,000 projects. People are thinking that we are new in this business. These products, we have been sold already for 15,000 projects and those are for private homes until high-rise buildings. If we are taking this kind of very big project – we are talking about 5,000 to 10,000 cubes there and so, we are talking about €5 million, €6 million, €7 million for each. It is, of course, many of them. But the portfolio is the key, that we have the residential building, we have schools, kindergartens, and then we have single homes as well.

**Annareetta Lumme-Timonen:** Okay.

**Jari Suominen:** It is many projects, but we are operating European-wide, at the moment.

**Annareetta Lumme-Timonen:** Sure, I understand. But I repeat, so we should think that a big office building wood delivery is somewhat below, I mean, a €10 million would be a really a big office building –

**Jari Suominen:** Yes.

**Annareetta Lumme-Timonen:** – delivery from your...?

**Jari Suominen:** Yes.

**Annareetta Lumme-Timonen:** Okay. Thank you.

**Harri Taittonen (Nordea):** Thanks. Just going back to the retails that you showed and – all this sounds like you should have a sustainable chance to kind of increase the value sort of creation in the division. But if you think that we started off the economic cycle in 2015 and that was when you had sort of the division sort of growth about 16% returns. Then, the peak returns were at almost 30%. I know the last 12 month, we are kind of coming down to sort of 24%.

But assuming that we get to the sort of slower economy and this sort of 2015 type of economic environment in construction slowing down and all that, how much is this sort of realistic to assume that you can stick – or how much kind of you – of this sort of margin and return improvement you can hold on to with these new concepts?

**Jari Suominen:** Yes. Thank you for your question. It is a very good question. Traditionally, wood products or, if I say, saw milling has been seeming highly volatile and that is highly volatile. It is very transparent and very dynamic business.

But what we are developing is that we are increasing our share in this highly developed building components. We are not just remaining there, we are adding their service and solution and digitalised concepts. We have step-by-step we have made already now made huge steps out of that area.

Also, in this Classic Sawn area, based on our global REITs and based on our European-wide operation, we have good possibilities to optimise that. This has been one big development area for us, that how we can manage the total portfolio. We are calling that phase an operation planning and there, we have made a lot of good steps as well. Not just that, but connecting to service models there. This will decrease the volatility.

Of course, volatile is there. And this is the reason why we have been keeping the good profitabilities. Of course, volatility will impact, but our target is significantly to reduce it.

**Harri Taittonen:** Thank you. Fair enough. Now, just a very quick question on the slide that you showed on the digitalised value chain and the sort of example of the new way of working. Have you kind of concrete – a lot of concrete examples of that or is it sort of still in the making or is it sort of something that you have done many times already –

**Jari Suominen:** Yes.

**Harri Taittonen:** – and whereabouts in the world?

**Jari Suominen:** We do not have any concrete examples –

**Harri Taittonen:** Yes, I understand.

**Jari Suominen:** – we have just wooden examples. However –

**Harri Taittonen:** That is good.

**Jari Suominen:** – I understood your question. Basically, we are developing platform and this platform includes different pieces. Like I mentioned, we are not developing that alone. We have a large partner network; we have very high-level, well-operating companies and we have start-up companies where we are working together and this we are developing.

There are many areas like I mentioned, the applications where carpenter can see how products will be moved in construction site to sub-working; like I mentioned, our products are already in Building Information Modelling. All pieces are proceeding and those are at least in pilot phase or already in commercial use. This platform starts to be in place. Of course, it needs to be continuously developed then.

**Harri Taittonen:** Thank you.

**Markku Järvinen (Handelsbanken):** As you said, construction is cyclical [inaudible]. I guess one could say has been at least highly cyclical. 2018 was the peak, and now we are seeing a bit softer markets. You set out this target of 6% to 8% growth per annum. If we look to 2024, should we sort of expect you to make up the difference towards the end of the period if it is a bit slower in the beginning?

Second of all, I would like hear how are you impacted now by the sort of pine beetle issues and the part of wood to the market in Central Europe. Thanks.

**Jari Suominen:** Yes. Basically, our growth target is over the cycle. Of course, like I mentioned, our volatility has reduced, based on our own work, but it is still there. But what we believe is the fact that like with our new solutions and innovation, we are entering completely into new markets we have not been early at all. Wood will increase the markets there, especially in urban environment. We believe that that will support our growth, going forward.

Also, as we have global REITs, so we have a possibility to optimise our markets. We have happy customers due to our new service models. This will allow us to be first one among industry. We are the leading in our industry already today. This is how we believe that the growth will continue.

You asked also you had second question about Central –

**Ulla Paajanen:** The Central Europe and wood situation.

**Markku Järvinen:** The pine beetle issue –

**Ulla Paajanen:** Yes.

**Markku Järvinen:** – and what –

**Jari Suominen:** Yes.

**Markku Järvinen:** – part of it –

**Jari Suominen:** Okay. Yes. This has influenced in Central Europe. There has been a lot of wood in market. It is, like Karl mentioned, longer term, its threat. On the other hand, where we need to invest and in Central Europe as in Nordic, we are investing is to continuously develop

the forest management. This will lower the risk, but risk is there. But this is coming similar way.

This is not just Central Europe, this is everywhere, these certain threats coming from global warming. But what I would like to highlight, that there are tools to limit the impact, if we manage our forest very well, like we are managing our Bergvik or our forest what we have been acquired.

**Ulla Paajanen:** Good. Okay, thank you. Thank you, Jari. Now, we will hear from Jorma Länsitalo about forestry. Jorma is a very experienced forester and he will talk a bit about his background because you are new to the markets. Thank you.

## **Integrated Forest Management – Our Competitive Advantage**

Jorma Länsitalo

*Head of Wood Supply, Stora Enso Oyj*

### **Opening Remarks**

Okay. Thank you, Ulla. Ladies and gentlemen, yes, I have been more than 30 years in forestry and wood supply business in this company and in the different operations and different countries. It is needless to say that it is really a great pleasure to be here today and to explain that how our new great forest assets in Sweden and new Forest Division can contribute to Stora Enso business.

### **It All Starts in The Forest**

You can say in Stora Enso, that it all starts from the forests. All our products are made of wood raw material. The forests are not only like a source of the raw material, but today, they are also deeply integrated to our value chain, from forest to the mill and up to the customers. Tomorrow, we will see that how close link there is between wood procurement and, for instance, wood products industry.

### **Creating Additional Value Through Supply, Innovation, And Sustainable Forest Management**

We are the second biggest forest owner in the world with our €3.6 billion asset in the biological assets. It is, of course, quite natural that we are establishing a Forest Division to increase visibility and transparency to our operations. I will go into little through – little bit through what is the Forest Division all about. We can put these into the three categories and three focus areas. I will walk you through all these three.

#### *Competitive wood supply*

First of all, it is, of course, wood supply. We are supplying wood to our industry in our operating area so that that would create a competitive advantage to our mills and divisions.

#### *Innovation*

Secondly, new Forest Division will serve as a platform for global innovation and development, and R&D. We can utilise our economy of scale to have more focus and coherent development work.

*Sustainable forest management*

Thirdly, of course, it is our forest assets, that how we can maximise the value how the forest assets are creating to the company.

**Controlling 30% Of Wood Supply and A No.1 Nordic Position Are Competitive Advantages**

But going first to the part of wood supply. Basically, we can say that wood supply has two key processes. The other one is the wood sourcing – how we are getting access to the wood – and the other one is the supply chain – how we are managing the whole wood supply from the forest to the mills. I will, today, focus more to the sourcing side because tomorrow, we will see more of the supply chain in the forest.

Starting about our forests. We are controlling, globally, some 30% of our raw material needs – highest, of course, in the plantations, but now after Swedish acquisition, so we are up to 50% in our total – of our total wood demand in Sweden. Actually, if we are looking our Central Sweden assets, we are covering 70% of the supply, like Karl said in his presentation. This gives us the strength against any possible turbulence in the wood market or any volatility in the wood market. We are very well-secured with our own forest assets.

Then, in the other picture, you see what does the new Forest Division cover. We are covering all the key market areas around the Baltic Sea: Finland, Sweden, Russia, and the Baltic countries. Out of our scope are the plantations, which are directly connected to Consumer Board and Biomaterials Divisions; and Central European procurement, which is directly connected to Wood Products.

In all these market areas, we can say that we are deeply integrated from forest to the mill. There is no other companies in this business that has such a coverage in this area. That is, of course, one of our competitive advantages. We can say that we know the wood business in this area much better than anyone else. We have tools to manoeuvre in the different market areas so that it balances our supply in a good way.

**With Our Scale, We Are the Most Efficient Wood Supplier in Northern Europe**

On the top of the geographical spread, we are also operating with all different wood sources. You see that our own forest and our long-term agreement, they are a big and important source. We are also doing very much business, both purchasing and sales, with other companies: business-to-business partners.

Why is that? That is to optimise the sourcing to our own mills. When we have a good geographical spread, we can optimise the transport distances with the wood swaps. We can optimise the wood assortment structure by selling something that we are not needing and buying something back.

**Strong Relationships with Private Forest Owners Are Another Competitive Advantage**

*50% of our wood supply is from 920,000 private forest owners in Finland and Sweden*

Another important finding in this one is that we are still very, very dependent and we are sourcing a lot from the private forest owners. That is a business of its own, I can say. 50% of our wood is coming directly from the private forest owners. Like Karl said, they are normal

people; ordinary people who are not so dependent on the forestry income. There is a lot of laws. Roughly a million people in Finland and Sweden are forest owners.

#### *Advanced CRM and sales force management*

We have been developing very advanced CRM techniques, very advanced kind of Salesforce, management systems to categorise segment purpose in our service offering to different forest owner segments.

#### *Professional services to private forest owners*

We have developed lot of services simply in a way to make it very easy for forest owners and to create also loyalty that they feel that it is easy and trustful to work Stora Enso. This is all very key of our wood procurement.

Putting this wood supply part as a nutshell so we are the No. 1 wood supply organisation around the Baltic Sea, because of our geographical spread, because of the integrated supply chain from forest to the mills, and because of our strong forest assets and good and close conduct to the forest owners.

### **We Are Building and Globalising Innovations to Increase Efficiency**

The next important area is the innovations and development. What is actually quite interesting, with the new Forest Division, is that we are now acting as one wood supply. That means that we can focus our development work, our innovation work much more coherent way.

Like it is said that we can use our benefit of scale. We are big. We can invest to those project that we think that are really important. You know that in the digital world, the marginal cost is zero. Then, we can implement throughout our organisation. That gives us strength.

### **Examples of Innovation and Digitalisation**

There is a lot of things going on here; I just give you some examples or areas, rather, that what we are working for.

#### *'Big Forest Data' and 'Precision 'Forestry'*

One big thing is that with all remote sensing techniques, including laser scanning and other techniques, we start know forests digitally in the very, very detailed way. You can say that we already, today, can produce like a digital twin of growing forest from tree by tree. There is a picture in the left. That helps us, of course, much better to steer our operations: to have a dialogue with the area and his business that what kind of saw logs he really needs, and to steer our operations to those locations.

#### *Digitalising forest owner service channel*

The same way, we can use this digital images of the forest to describe to the forest owner that how does his or her forest really look like. There is no need to walk to the forest. Actually, with this device – you see in the mobile phone there – you can fly over the forest, look how it looks like. You can simulate how our operations are impacting to forest. How does it look like after 20 years after harvest? This is, of course, naturally helping a lot our communication with the forest owners.

Tomorrow, we will look closer to optimise supply chain and especially what we can do to maximise the value of the trees to our industry.

## **Creating Additional Value from Our Own Forests**

The third area is our own forests. Like already described in Karl's presentation, there is many ways how we are creating value with our own forests.

### *Increasing asset value*

First of all, forest is a very nice asset in the sense that we can increase the yield: we are now in the 4% pretty much for the growing stock. But with the right actions, with a good management of the forest, we can further increase the yield and, in a way, increase also the value of the asset over time. Right from then, you have the technical assets so that this asset is increasing in the value.

### *Return from wood sales*

Our main income is coming, of course, from the wood sales. We are using maturity of annual growth in the harvesting – I will come back to this a little bit after that – and that is the main source of income to us.

### *Stable and secure supply*

Very important to us as the forest are part of our integrated wood supply operation is that we can use also our own forest to balance the wood supply. If there is like disturbances in the wood market or any unpredicted changes, we can be very flexible with our operations in our own forest.

### *Land development*

The last, maybe a bit less significant, is that we can use our forest area to many other purposes and create some additional value there. We are, for instance, developing wind power parks, which we are then selling or leasing to actual power production companies. We can still continue to grow forest in those areas or using the land for the construction planning and so forth.

## **Today's Consumers Demand Sustainable Forestry**

### *Optimally managed sustainability is a competitive advantage*

When talking about own forests, so sustainability comes first. To us, the sustainability actually covers everything what we are doing. We looked it as three aspects of sustainability: economical sustainability, social, and environmental sustainability. There is a continuous dialogue between these aspects.

I would dare to say that we are probably the company who is the most active participating and even initiating this dialogue. We have seen it very constructive way to match these different aspect together. In many cases, what is good for the forest can be good for the sustainability. As we discussed earlier about the climate change and how to manage the forest in the good way. We believe that the healthy, well-growing forests are good protecting the climate change. They can sustain best way also the damages. Also this, we will look little bit closer tomorrow in the field: what are the like biodiversity actions in concrete way when doing the operations in forest?

## **We Are Increasing Sustainable Yield Without Compromising Biodiversity**

### *Increased harvesting by 10% to 15% in our Swedish forests*

About the yield, I have mentioned earlier, Bergvik has been, historically, about 3.5 million cubic metre in the harvesting annually. We have taken over now this asset starting from 1<sup>st</sup> June

this year. We have, of course, started the analysis of the forest assets and the possibilities there. We are confident that we are able to ramp up the harvesting level in the very sustainable way without risking the future growth or risking the forest capital there to the level of 4 million cubic metre. We also are confident that this is not all. We will continue from here onwards. We will invest more to R&D and technology development to further boost forest products.

### **Additional Yield Initiatives With +10% Potential**

How to do that in practice then? Here is couple of key things.

#### *Tree breeding and biotechnology*

We, in the small team, discussed about the tree breeding and tree breeding technology. There is a lot of experience and a lot of historical work done with the tree breeding in the Nordics. It is slow work, but it brings results.

We already know that well-selected seed, which are produced through the seedlings; we have forest nurseries to produce seedlings with. Those seedlings can grow up to 25% better than such – these kind of like a forest seedlings. There is a big opportunity there.

#### *Forestry practices: 'Precision Forestry'*

Another thing little bit related to the digitalisation or much related to digitalisation is actually this: we call it Precision Forestry. What it means? That when we have a good understanding what is our forest with our remote sensing technologies, we can be much more accurate with our forest management activities. We can do right things on the right time. That is proven to be very effective way, basically, without additional cost, to increase the forest products.

#### *Sustainability and biodiversity*

Another thing that we have already started is quite extensive R&D in the field of biodiversity and sustainability. We are doing all this in cooperation with the different kind of institutes, universities, so forth. In the field of biodiversity, we have the same kind of like efficiency target. We want to do biodiversity actions that really have a meaning: not just in order that we can tell that we are doing this and this, but to do something that there is a measurable impact out of those.

### **Summary**

I am coming to the end now. I hope that you could take the three main things what I had in mind. Firstly, our wood supply organisation is No.1 in this area. We are deep integrated from stump to the mill. We have a good flexibility over the different sources of wood suppliers, but also geographically. This will give us flexibility and, of course, supported by strong own standing forests, but also close relations with the forest owners.

Secondly, we believe that innovation, including digitalisation, will bring us to the position that we can be recognised as a leader in this industry in some years' time. Due to that, we can use global platform, invest more, and implement the results widely worldwide.

Then, last but not least, we really believe on the further potential of our forest assets. We are now ramping up our staff and our skills to bring that further. But we know that there is further potential there. Thank you.

## Q&A

**Oskar Lindström:** Yes. In the old Bergvik Väst, which you acquired, a number of minority shareholders have also taken out forest land, which they now own themselves. Are you going to be sourcing wood as before from these minority shareholders who have now become independent forest landowners?

**Jorma Länsitalo:** Partly, yes; and partly, no. There are three bigger minority shareholders with whom we have already made the long-term supply agreements. I will say then how is the rest. But with these three big ones and our own forest, we are very well-covered already.

**Oskar Lindström:** It is not a situation that you now need to go out and find new suppliers –

**Jorma Länsitalo:** No.

**Oskar Lindström:** – to replace the ones that you have lost then?

**Jorma Länsitalo:** No. Yes.

**Oskar Lindström:** Okay.

**Jorma Länsitalo:** Of course, I mean, we are all the time well-supplied also from the private forest segment but, basically, that with the existing own forest and the new suppliers, we are covering the same volume that what we had earlier from Bergvik Väst.

**Oskar Lindström:** Another question on sort of the transition from Bergvik Skog to your new forest holding is, I mean, Stora Enso was, as I understood it, managing the forest land for Bergvik Skog previously – in particular, Bergvik Skog Väst areas. Now that some of that forest land has been taken out of Bergvik Skog Väst, does mean that your forest management organisation is oversized and that you need to reduce it or how are you coping with that transition?

**Jorma Länsitalo:** Yes. Bergvik had something like 30, 40 persons. Very few of those were transferred to us. We are now in the middle of reorganising our staff. We will get some synergies because there is some overlapping functions.

Then, in the field, you are quite right that in some areas, we need to restructure our operations because we are not anymore doing the silviculture work. Most clearly, majority of the external forest owners are also relying on our services, when it comes to silviculture and harvesting.

**Oskar Lindström:** Maybe this is a question for you, Ulla. Does that mean we should expect some non-recurring items or extra costs here as this is being restructured?

**Ulla Paajanen:** I mean, we have not been announcing anything major in advance and they come in a timely manner.

**Karl-Henrik Sundström:** You will see in Seppo's presentation on what we are doing in the profit protection in segment 'Other' because segment 'Other' will be different now.

**Seppo Parvi:** Yes.

**Karl-Henrik Sundström:** In the presentation of Seppo, you will see that. That is a good question for Seppo.

**Oskar Lindström:** Thank you.

**Ulla Paajanen:** Okay. I think it was Mikael Doepel next.

**Mikael Doepel (UBS):** Thank you. You mentioned the potential to increase the harvesting and also increase the yield. Would you be able to quantify, in terms of earnings impact, what the potential would be from all of the measures that you are doing? I do realise that you are kind of, as you mentioned, ramping up and it is in the middle of the process. But any –

**Jorma Länsitalo:** Yes.

**Mikael Doepel:** – numbers you could –

**Jorma Länsitalo:** No.

**Mikael Doepel:** No?

**Jorma Länsitalo:** Not really, in the sense that exactly like you said. But we are in the very early phase, but kind of analysing the different activities separately. I have promised to my boss that there should be +10% further potential, but the time is not defined.

**Mikael Doepel:** Okay.

**Karl-Henrik Sundström:** We will take you up next week.

**Mikael Doepel:** Yes. Then, just another question on the level of integration or self-sufficiency. It is currently at 30% now with the Bergvik acquisition in Stora Enso. If you could decide, do you see an optimal level of self-sufficiency for a company like Stora Enso? Is this good or would you like to see a higher level of work?

**Jorma Länsitalo:** Now, the issue here is that this 30% is not at all equally spread in the different geographies. I mean that the Sweden now, with 50%; then mid-Sweden with 70%, that is extremely good. That is fantastic. In Finland, we have 10-15% coverage and that is clearly low.

But I think Karl mentioned that there is not, in a way, big opportunities hanging around there. That is not the reason that – we believe that we can get very much of these benefits if we are able to create good service models to the private forest owners, in a way increasing their loyalty, possibly increasing little bit long-term supply agreement even with the private forest owners and, in that way, kind of stabilise more our business.

**Mikael Doepel:** Good. Thank you.

**Ulla Paajanen:** Okay. I think Robin, and then Sindre here in the beginning. Then, I think we need to park the rest of the questions to the Q&A session.

**Robin Santavirta:** Thank you. Now going outside of Scandinavia to your forest that you lease in China, what will you do with those in future? Are they core for you? Is that operation profitable or loss-making for you? How much of the CTMP pulp you produce from Beihai is from wood raw material from these forests? Thanks.

**Karl-Henrik Sundström:** Jorma is supporting them with expertise how you run plantations because that is for the support of that. But when it comes to it, we are clearly long in wood in China. That was because of the intention, earlier on, to have a pulp that we then decided not to do. We are in a process of handing some of that and keeping the best land. That is what we have been doing.

**Ulla Paajanen:** Yes. I guess, chemical pulp mill.

**Karl-Henrik Sundström:** Yes. We have the CTMP.

**Ulla Paajanen:** Yes.

**Karl-Henrik Sundström:** We did the plantation of that.

**Robin Santavirta:** Plantation of own forest.

**Karl-Henrik Sundström:** Yes.

**Robin Santavirta:** Yes.

**Karl-Henrik Sundström:** It is leased forest.

**Robin Santavirta:** Yes. We all know that. Then, just on the Veracel and Montes del Plata, what is the self-sufficiency, in terms of wood raw material there? Why is the value of the hectare in those places, where forest really should be valuable and grow fast, so low?

**Karl-Henrik Sundström:** 70% to 80%, we have in the plantations in Latin America. You need a little bit and we implemented that especially in Veracel, we have three farmers. Then, we have the similar situation. The values of those we are digging in because it has not been land sold in Bahia very long time. But I can tell you it is a high value.

**Robin Santavirta:** It is not booked high.

**Karl-Henrik Sundström:** What?

**Robin Santavirta:** It is not booked high. It is as if –

**Karl-Henrik Sundström:** No, but one, you should never mix. Maybe I take this fun to know. You have a balance sheet value and we value everything in the balance sheet because the value of Stora Enso is not the equity value. Right? It is the market value. It is depending if it is a book value, what somebody is willing to pay for it, which is a total difference. Sometimes, we mix these things. They are different values.

When it comes to biological assets, you basically are valuing the trees and have basically no value on the land because you have the plantation and the forest for the wood supply. Right? I think you are – it is almost what is the purpose? Are you trading forest? Then, it is one. Or you are having it for wood supply? It is a different value. I think we need to be a little bit clear the purpose.

If somebody would really interesting in buying additional forest in Bahia, and you can probably see a bit of the value in Uruguay because there is land being acquired recently. That is semi-public. They are expensive.

**Robin Santavirta:** I agree. Thanks.

**Sindre Sørbye:** Yes, hi. The cards have, in some way, been dull for you now. Should we expect in the Bergvik maybe that you will, let us say, swap some forest plots with other owners, in some instances, maybe sell off some non-productive plots if you get a very good price for that? In case you could add some plots, should we expect to see increased activity, going forward, now you control it?

**Jorma Länsitalo:** The answer is yes. Our strategy is to maintain in this level in the forest ownership, but exactly like you said, there is a continuous trading. If some plots are not so well fitting to our portfolio, we might sell something out and then purchase something back.

Another thing is also that there has been, in the history, possibilities to swap some set-aside lands with the state to the productive lands.

## **Strengthening Our Competitive Position Through Integrated Forest Assets**

Seppo Parvi

*CFO*

I will give a bit financial flavour to the newly formed Forest Division. I will also talk a bit about the profit protection programme that we started earlier this year, a bit about trimming working capital and then also about capital allocation going forward.

### **Driving Performance and Value Throughout Competitive And Sustainable Business**

I will start with the cornerstones of driving a competitive and sustainable business. The theme today has been about integrated forest assets and integrated wood supply. That is where it all starts, and that is pretty much key to everything we do. But we also continue our continuous improvement projects and work. Good explanations or good examples there of our profit protection programme and working capital reduction work that we are doing. And all that, amongst other things we are doing, is then of course leading to increased shareholder value.

### **Wood Supply Substantially Strengthened After Bergvik Deal**

Then about the forest assets and big picture: like Karl or Jorma already mentioned, we are globally second largest private forest owner. €3.6 billion of biological assets in the balance sheet; €0.5 billion on top of that when it comes to forest land, so €4.1 billion. And the latest important transaction there has been this acquisition of 1.4 million hectares of Swedish forest land.

### **Direct Ownership Of Swedish Forests Improves Our Optionality In Wood Supply...**

Then a bit about the rationale behind the deal. Why did we do the transaction? It is very much about the optionality around the forest management and forests and wood supply in Sweden. It is enhancing integrated wood supply, as has been mentioned already several times during the day. I think Jorma gave you a good picture on what it means in practice. It is about supply security. You should remember what has also already been mentioned today: it is 70% of the wood needs of our mills in middle Sweden. Half of our needs in total, if you look at Sweden as one total entity.

It is also about flexibility. It means that, depending on the market situation, we are able to harvest more or harvest less. That reflects a use flexibility when it comes to internal use of wood or external purchases, and that may balance a bit our own exposure to the market. It is also about the synergies, cost improvements and more efficiencies at the end of the day. And also, we strongly believe that the figures that we have shown yesterday and I also have here the illustrative figures for first half of 2018 – that is based on as was, and we strongly believe that we can take it further and improve the returns of the forest assets that we have taken over now with the actions that we are implementing.

**...With Attractive Valuation**

We also mentioned to get the additional forests here with very attractive price and valuation. For the additional hectares, we paid €2,400 a hectare. Average price is about €2,000 a hectare if you look at the total ownership of these 1.4 million hectares here. If you put that in perspective, it is about half of what BillerudKorsnäs got when they divested their share of Bergvik Skog forests after the restructuring. It is about one third if you look at the statistics in Sweden when it comes to deals done in the whole country. So, very attractive valuation for the deal.

**Forest Assets Both Appreciate and Are Renewable - Reflected In Lower Funding Cost**

Then, when it come to the asset itself, it is a very attractive asset. It is an appreciating asset, and you can get very beneficial financing for this kind of asset. When we did the deal, we also launched our first green bond. It was the biggest green bond in the history of the Swedish market at the time when we launched it and made the transaction, and the terms and conditions were very good and favourable. On top of that, we also did two bilateral arrangements for funding. Green bond framework was also used there, also with very attractive terms and conditions. That was also an important step for us in the treasury that we have been preparing for green bond for a long time and looking for a good opportunity to tap the market. This was an excellent example of where green bonds can be used, and it is working.

**Increasing Transparency Through Our New Forest Division...**

We also promised, when we announced the first time and more recently about the deal, that we will increase transparency about forestry and forest reporting. At the same time we are increasing transparency for the forest assets, Forest Division, it also means that there is more transparency for segment Other. As you know earlier, wood supply and our forest assets in Nordic were all reported in segment Other that has become a big black hole for many of you – very difficult to estimate or foresee what is happening there. I think going forward that will pose a more straightforward and easier for you to follow and understand what to expect in the coming quarter and coming years, and also to understand the movements.

Another thing before I go into the figures is to remember what Karl mentioned. If you look at our Forest Division, it is not exactly one-to-one if you look at our Swedish competitors as an example. For them it is more like Bergvik Skog – standalone type of thing – while we are also including in the Forest Division wood sourcing and wood supply organisations, not only in Sweden but also in Finland, the Baltic countries and Russia, so it is a bit of a different type of setup because of us having wide operations compared to some of our competitors.

**...With Over 50 MEUR Higher EBITDA Annually**

While becoming more transparent and starting to report separately forestry and Forest Division figures, we have also been working on and trying to build the reporting and change the reporting principles so it is easier for you to follow and understand the value creation of the forest assets. It is not only about the harvesting. It is about how the return of the forest assets is dealt with and where it is coming from. That is why we have changed a couple of things on the reporting. First of all, when it comes to fair value changes, we are splitting that now to operational and non-operational parts. The operational part, which will be included in EBITDA going forward,

includes inflation-related changes and harvesting differences versus harvesting plan. Those will be included in EBITDA going forward.

We are also changing reporting of the silviculture cost – planting, basically – as a material cost so that, instead of including those in the costs, we will in future include those below EBITDA in the same manner as we have already been doing for the plantation-related silviculture costs. In that way, we are harmonising the reporting for the different forest assets that we have in our portfolio.

### **200 MEUR Profit Protection Programme Strengthens Our Fitness for The Future...**

Then, if you look at the figures that we published yesterday, which gives you some idea and picture about the reporting. First of all, the change in the reporting principles is increasing EBITDA by €50 million compared to the figures that we have reported earlier. And we think that, with this change, like I said, it better demonstrates the value creation from the forest. Total sales of the Forest Division in 2018 was about €2.3 billion. €750 million of that was external sales, and operational EBITDA about €130 million.

By the way, the changes we are doing to the reporting principles does not change IFRS-related operating profit, so that remains as is, no difference on the operational EBITDA and operational EBIT. Operational EBIT is going up €30 million compared to the past.

We will come up with restated figures during the first quarter next year before we report Q1 figures with the new structure when it comes to reporting and including Forest Division figures there. Like said, the reporting change is valid from 1<sup>st</sup> January next year.

### **...And We Have Launched TRIM to Reduce Working Capital...**

Moving a bit to profit protection programme that we launched in February this year on a €120 million originally; increased that to €200 million in July. It is moving forward as planned with good speed – actually, better than I personally dared to expect, so the organisation has done excellent work defining opportunities to protect our margins and profitability. Roughly half of the improvement is coming from variable side and roughly half from fixed costs. You can also see from the graph here that, you could say, all divisions and functions contributed their fair share to the total. Obviously continue to work also on additional actions, so we are very confident that we can reach €200 million as promised, or even go beyond that as we push the programme forward.

### **...Maintaining Healthy Cash Flow**

Then another area that we are working. Obviously it's extremely important if you think about uncertainties in front of us and if you look at the global economy, and that is cash flow. And we started after Q1 to work on working capital – to trim our working capital. We have named it TRIM, the Turn Round Idle Money project. And we started end of Q1. Through the Q3, you all saw our report, so we already reduced some €120 million from working capital, and the work continues. The working capital was creeping up somewhat during the past couple of years. When the sales was going up, we were ramping up the investments, so now it is a good time to bring it back to the levels we have seen earlier.

And that means, and we are confident, also going forward we will have healthy cash flow. Healthy cash flow is important not only because of the challenging business environment but also if you look at the capital expenditure.

**CAPEX Raised Temporarily Above Depreciation...**

We also announced yesterday that we are increasing our capital expenditure estimate for next year from about €600 million that we have been having over the past couple of years to €800-850 million. The increase is because we want to capture the growth opportunities and to do the conversion of Oulu from paper to kraftliner as soon as possible, and also at the same time be sure that we can capture the growth opportunities in the other businesses that we are in, so that we do not limit our hands too much. But this will be a temporary increase; after a couple of years, we are coming back to the levels we have indicated earlier as the sort of level to be expected that we need to keep the growth rates that we have and develop the company. So coming back to about the level of depreciation, which is around €600 million, as seen earlier.

To fund the temporary increase in the CAPEX, that is coming from cash flow. That is why working capital reduction is one of the key actions we are implementing to fund it, as well as from non-core asset disposals. Over the past five years, we have already released about €600 million from non-core asset disposals, and we continue to work. There is still some more cleaning that we can do in our business portfolio and use those proceeds also to fund the temporary increase of the capital expenditure.

**...And Is Allocated Based on Capital Returns**

Then, when it comes to capital expenditure and capital allocation, we continue, as said earlier, to base it on capital returns. This is now the estimate for 2019. If you look at the board divisions – Packaging Solutions and Consumer Board and Biomaterials more or less on the same level with each other – obviously, next couple of years, Packaging Solutions will be somewhat higher than the other divisions because of the conversion of the Oulu mill. And this is the key. I think the organisation, since we announced the division-based return on capital targets, has very well understood the meaning of return on capital. It is driving capital expenditure proposals and the way we develop the company very well.

**Strengthening Our Competitive Position Through Forest Assets**

So, with these actions, I dare to say that we are fit for the future. We are having very good integrated forest asset wood supply in place. We are trimming working capital. We are working on profit protection programme and adding value to you, our shareholders. Being fit for the future means that we are ready for the challenges in front of us, and also ready to capture the opportunities that there are in front of us in bioeconomy and elsewhere.

**Q&A**

**Johannes Grunselius:** Hello. Curious about the extra land you could acquire in conjunction with the restructuring of Bergvik. Seems to be a very, very good price. Were there any sort of special circumstances behind that?

**Seppo Parvi:** Well, I think it was based on the total valuation of Bergvik Skog, and it was a big deal. As part of that, some of the previous shareholders and our partners wanted to exit and rather get cash instead of keeping the land and forest in their portfolio. We of course used the opportunity, because we see the opportunities and benefit of having forest in our portfolio. So I think we were opportunistic, and it was, like I said, very attractive pricing.

**Alexander Berglund (Bank of America):** Thank you. First of all, on speeding up the Oulu conversion, obviously we still expect the coated wood-free to stop in September 2020, or is that also moved so it just happens quicker?

**Seppo Parvi:** We are keeping the plan that we will run coated wood-free in Oulu about a year, so end of September, and then do the conversion works. The project has started well, so we have placed the orders to equipment suppliers and are then preparing so that the conversion can then take place during the fourth quarter, basically. It will take two to three months, like in the case of Varkaus. So, by end of next year, we should be able to start to ramp up the production. It should go pretty fast, like you remember in the Varkaus case. And of course we are a bit more experienced on that now.

**Alexander Berglund:** Thank you. My second question was just on the counting and on the silviculture cost. You mentioned that you want to do the same as in the plantation, but I just fundamentally want to understand the reason why this is not in the EBITDA. This is something you have to do continuously as a cost, so why is it not captured in the EBITDA?

**Seppo Parvi:** Well, it is reported below EBITDA because, by nature, you could look at it, and you should look at it, like an investment that you depreciate. That is how we are treating the plantation-based forests. But of course then they are taking a bit of practical approach here. We are moving the annual costs to the same line as we are doing with the depletion with the Nordic assets. Remember, Nordic asset growth plans are 70, 80 years. To capitalise that and depreciate would be quite an administrative nightmare, so we are taking a shortcut there because, over time, they are more or less the same.

**Alexander Berglund:** Okay, thanks. That is very clear.

**Mikael Doepel:** Firstly, on the transformation, you talked previously about speeding up the transformation of the company. Now you are speeding up the Oulu conversion and investments there. Beyond that, I guess you have been looking at Testliner in Poland; you have the other PM in Oulu now being idled and not being converted; and then there might be something else as well. Where do you see the next investment going? What seems to be the most attractive right now from the options that you have?

**Karl-Henrik Sundström:** I think there are a number of important – what we are trying to do is to have more ideas than we have money, because that focuses us to choose. There are many alternatives, but we need also to think about complexity and time to market, as well as the situation. Right now we are speeding up, partly because we want to get to the market. The other thing is wood-free coated is a bit ugly right now, so get that out faster. And then we need to focus on cash flow to get back to make sure that we are net debt to EBITDA below 2. And we believe, with the money we have available going forward, there are a number of interests, but I will not tell you what. Maybe I am not the one to tell you.

**Seppo Parvi:** I think Jari showed you some good examples when it comes to wood products, looking at the wooden buildings opportunities, bio-composites and other things, on top of, like you mentioned, second machine in Oulu. No decisions made, but obviously we need to look at that. What do we do with the machine there? We are not planning to scrap it; that is the first thing. That is something to be looked at later.

**Mikael Doepel:** You mentioned the short-term challenges in the market; it is a tough environment out there. Could you talk a little bit about what is happening in the market right now in terms of demand trends and pricing and costs? What are you seeing now in terms of the trading across the different business areas?

**Seppo Parvi:** Yes. I think it's fair to say that, like we also said, that in the quarterly reporting and interim reports that there has been some softening of the market. It's very much driven by US-China trade relationships. We see the supply chains of people are getting more and more cautious and running down their inventories, which is having an effect on the volumes that we are supplying, or our customers are supplying. Difficult to say and to put the finger on exactly on how much the end demand has come down, but clearly the supply chain has been emptied, and that's one reason for the pulp market coming down. The interesting question is then of course what is needed and when things happen in geopolitics that would balance the situation, but you can all look at Twitter and see the flow turn and then try to make your best guess.

I'm very happy that we started our profit-protection programme early this year. I think we are a step ahead of many other companies when it comes to protecting our margin. Also, we are clearly taking a view that we would rather protect our margins and prices than go for volumes, because it's very difficult to increase prices if you go into that game.

**Mikael Doepel:** Thank you.

**Gustaf Schwerin:** Just to understand your new CAPEX guidance. Correct me if I'm wrong, but if I remember correctly, when you were talking about the Oulu transformation before, it has sounded like you had room in your CAPEX levels of depreciation to finance it with that. And when you announced the final decision to do this conversion in May, the plan was back then already to ramp this machine up by the end of next year. So what is the difference here?

**Seppo Parvi:** Obviously we were looking at the speed of transformation during the feasibility study and already, remember, then we announced the conversion in Oulu confirmed we increased CAPEX for this year by 70 million, for obviously the same reasons. At that time we did not comment on finance for the coming year, because we do not do that, we typically guide only the year and then we have this Capital Markets Day, we give investors more guidance for the coming year. And of course it's how you set priorities. We could squeeze it into the 600 but that means that there would be a lot less other development projects, and like I said, we see a lot of opportunities, like you saw in Jari's presentation earlier today. If we squeezed this all in, it would mean that a lot of other things would need to stay in the queue and that would be a pity, because that would stop our opportunities to capture growth and in the bioeconomy. We need to keep the momentum.

I think one thing to note is, as I've said several times, it is a temporary increase for a couple of years. Next year will be the highest then it starts to come down and in a couple of years it should be back to 600. We are funding it through employing working capital and by non-core asset disposal, so we are cautious making sure that we do not destroy our balance sheet. We want to be strong.

**Karl-Henrik Sundström:** And I did say in my presentation the average for the next five years is 680 including Oulu.

**Gustaf Schwerin:** Then secondly, what kind of money do you have to spend on the second machine in order to keep it in good shape for a potential future conversion?

**Seppo Parvi:** Not a lot. Of course it takes some expenditure over the year to run it round every once in a while and ensure it remains in running order, but we are not talking big money. It will not kill our result, don't worry!

**Karl-Henrik Sundström:** It is a couple of million euros to heat it in the wintertime and rotate the critical parts.

**Gustaf Schwerin:** Thank you.

**Ulla Paajanen:** Okay, I think it's Cole.

**Cole Hathorn (Jefferies):** You've talked today about your forest operations and the benefits you are going to get there. I'm interested to know why, when you thought about it like your Swedish peers, you did not think about revaluing the forest on your budget sheet.

**Seppo Parvi:** Sorry, can you repeat?

**Cole Hathorn:** Some of your Swedish peers have thought about how best to reflect the value of the forest on the balance sheet. I was wondering why, when you thought about today's Capital Markets Day, you did not think about potentially addressing that?

**Seppo Parvi:** I think we had just acquired the asset, we have done a fair valuation when we took it over with the parameters we use, and I think in point of fact, I do not know what they are planning to do but if you look at the total portfolio and assets, like Karl said earlier, you need to separate biomass and land, forest land. And those are two different things. Typically when it comes to fair valuation you talk about the biological assets and land is at historical value. Now, when you make deals and you buy and sell forest land, then it is land and biological assets on it that they sell with it. I think the challenge with forest assets is that there are not often large deals that you can use as a benchmark. There has been now, of course, our transaction and then what Billerud Korsnäs did. But typically this kind of transaction does not happen every year and that makes it very difficult how to benchmark. Then you need to rely on the cash flow modelling.

But of course, I think the statistics show that we have done a good deal. There is a lot of value in the forest that we have in our hands. But you also have to remember, we are running forestry to run industrial operations, compared to financial investors who are looking for alternative investment opportunities to what might be a negative return on German government bonds, so that drives the valuation in many cases.

**Cole Hathorn:** Thank you.

**Ulla Paajanen:** Okay, Robin?

**Robin Santavirta:** Thank you. In the future short term or mid-term, do you think that these forest valuation levels that we have in Sweden and in Scandinavia make it smart for you to increase the net holding of forest assets, or are there better risk-reward returns in terms of industrial operations for you?

**Seppo Parvi:** It is of course always a balancing act. We said earlier that, yes, we are interested to increase forest holdings if they are optimally located to our mills. Running an industrial operation and wood supply is about logistics. So I think if there are attractive land areas in the

proximity of our mills, it could be interesting, but not to start looking at something thousands of kilometres away, because that adds very fast to the costs.

**Robin Santavirta:** So basically if you look at transactions we've seen in Sweden, they are very much driven by where the forest assets are located compared to the industrial operation of the buying company.

**Seppo Parvi:** For us, yes. I cannot talk on behalf of our competitors or other investors.

**Robin Santavirta:** That makes sense. Thanks.

## Concluding Remarks

Karl-Henrik Sundström,

*CEO*

Sit down, this is a short speech, about half an hour. No, I am kidding. So first of all, thank you all for coming here. The purpose of this was to explain the logic about the Bergvik transaction and the values we see in creating an integrated forest management to our industrial operations. It was also a way of demonstrating how we look at the future, of our growth opportunities, especially on wood products, which I think has been treated historically in our industry as saw-milling and is actually one of the most sophisticated businesses we have with the highest level of digitalisation within our company.

And also just to tell you that wood products have been the most stable, have had the highest and most stable profitability since 2013. When I joined this company in 2012, my previous boss said, sawmilling is not good. 'It's seven good months and seven bad years.' And I think today was a demonstration that this is actually the future. It has a very nice capital structure, it is capital-light compared to everything else we do, which means that you can accelerate, and you can build a very competitive platform with initialisation and a light touch with a digital tool.

I also think you also have gone through some of the rationale surrounding our trim programme and profit protection programme. And I will tell you, we started the profit protection programme right after the US election. So we had a simulation of what might come out if Mr Donald Trump started to deliver on his promises. In 2018, we gave all divisions a target to prepare for a tough period, because when geopolitical and business start to diverge, then you know something is happening.

So by midyear 2018, all divisions had trained what to do in case there was a change in the market. We had developed early indicators and then we decided in conjunction with Q4 to launch it. I got a bit scared because all other companies in Q1 this year said there is no change in the macro-environment and order books. I think Q2 and what you have seen lately is actually demonstrating that we are going into a more downhill stretch.

So I am very happy for the organisation. And this is almost the same amount of cost reduction as we did in the reshape in 2012 to 2014, but without any screaming in the organisation. And it is about proactivity.

This is my last Capital Markets Day for Stora Enso, so I thank you for coming here and I tell you this is a great company. Thank you.

[END OF TRANSCRIPT]