

REFINITIV STREETEVENTS

EDITED TRANSCRIPT

KEMIRA.HE - Kemira Oyj Capital Markets Day

EVENT DATE/TIME: SEPTEMBER 13, 2022 / 8:00AM GMT

CORPORATE PARTICIPANTS

Antti Salminen *Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board*

Jari Rosendal *Kemira Oyj - Chairman of Management Board, President & CEO*

Matthew R. Pixton *Kemira Oyj - CTO & Member of the Management Board*

Mikko Pohjala *Kemira Oyj - VP of IR*

Petri Castren *Kemira Oyj - CFO & Member of Management Board*

Sergej Toews

CONFERENCE CALL PARTICIPANTS

Andres Castanos-Mollor *Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst*

Antti Koskivuori *Danske Bank A/S, Research Division - Analyst*

PRESENTATION

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good morning, and a warm welcome to Kemira's Capital Markets Day here in London hybrid event. My name is Mikko Pohjala, Vice President of IR, and I will be your host today.

So today, we are recording the event from the London Stock Exchange here in the city of London. And the majority of you will be actually following online, but we have a good bunch of people here in the audience as well. But before we start, following the death of Queen Elizabeth last week, so on behalf of Kemira, our greatest condolences for the people in the U.K. for the loss of Queen Elizabeth.

Coming back to the agenda. So yesterday, we arranged a site visit in Bradford, in Northern England where the participants had the possibility to tour our polyacrylamide, dry polymer facility. And today, we are here in the city going through sort of an update on how we are progressing on our profitable growth strategy.

So the event will last around 3 hours. I'd say we have an interesting morning ahead of us. And you will hear an update from various parts of the business, starting from our CEO, Jari Rosendal going through the segments, R&D and then finally, concluding with our CFO, Petri Castrén. But before we start, a couple of practicalities for the Q&A. So as mentioned, the majority of you are following online. So you can submit your questions with the screen in front of you. And then here in London, there will be microphones that can be sort of given to you should you have a question. So there's a possibility to ask questions after each presentation, and there will also be a concluding Q&A at the end of the Jari's concluding remarks. So we plan to end at around 12 depending on the amount of your questions.

But with this short introduction, I'll hand it over to our President and CEO, Jari Rosendal, to give an update on the big picture.

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

Bit of bright lights, but good morning from my side also, and great to be here in London. Great to see, I guess, quite many people behind the screens, not present there. But it's really exciting to talk to real people not at camera lens for a long time because doing it for 2 or 2.5 years is getting a bit tiresome.

So giving you update on various areas, as you saw the agenda. But last 3 years, we can say, has been exceptionally volatile. I don't have to list the things that have gone sideways and following each other. But Kemira organization had weathered the situation, in my opinion, quite well. We have

a high engagement in our organization, and we get good replies and praises from our customers. So that motivates the people to also keep the customers running and solve the issues that we've been dealing with month-on-month and are still dealing today.

Therefore, the numbers speak for themselves. Solid revenue development, as you can see from the left, especially good development on the operative EBITDA in the middle. And then show it all EPS as everything in it, even the historic burdens that we've been cleaning off the table quite successfully over the years. So EPS has developed quite nicely over the last years. That's the near history. So let's start looking at what is the big picture going forward and then my colleagues will go deeper in those topics.

We have grown well. And mainly this year, we've grown through a sales price management, obviously, behind the higher raw material and input costs. We continue to drive profitable growth and we drive developing a strong foundation that we have built for ourselves. We have good growth pockets inside our business. APAC is growing strongly, although question marks around China lately. Pulp growing strongly, packaging and water strongly growing. New opportunities come from new offerings of bio-based strategy. You'll hear more about that from Matt today. And we will grow in the bio area faster. We have made some moves there that we will speed that up.

The sustainably drive that we are all feeling is a big factor for us, but it's a big factor for our customers and our partners and is a megatrend that is working for us. We're also open for M&A and scanning opportunities, especially in the water treatment space. So we have been able to demonstrate faster growth than the market has been for us.

A bit deeper into what has been there, and I won't go through all of this. But when you look at the work we've done to execute our strategy during the last 3 years, there's been good progress regardless of the challenging environment. We completed the AKD investment and started that up, and that's a buyer-based strategy, by the way, at the same time. We have started to build the bleaching site expansion in Uruguay. We've done some bleaching investments in North America. Here in the U.K. we increased coagulants capacity because of the (inaudible) capture regulation has been tightened. We also have then closed a site in France, for example, that didn't meet our financial targets.

So a number of activities have been done on top of diligently running the business in a challenging environment. Here's a picture that, in our view, shows on how we see the five main application areas of Pulp, Board and Tissue, Printing and Writing, Water Treatment and then Oil and Gas. And you can see from the table how we have categorized it into total zero sales, how it serves the sustainability relevance, how CapEx-intensive it is, M&A opportunities, role in the Kemira portfolio, how we see it and then how it's growing and growing profits.

Pulp chemistry is 25% of our overall revenue, strong business, and we have a strong position in pulp business. And it's based on our own proprietary technology for sodium chlorate manufacturing. It has a rather good growth profile but it's also CapEx intensive. So each growth case needs to be carefully considered. Board and Tissue continued to grow, and we aim to grow with it and it's also 25%. Printing and writing getting smaller and smaller, but it's still using the same chemistries. We have good know-how in that. So that's a cash-generating business for us. Water is one of our backbones with pulp chemistry. Water is 30% of revenue and continues to grow. We are, as I said, also scanning inorganic moves there. Oil and gas, 10%, mostly also water treatment in the oil and gas, although it has that name. So when the pumpers pump oil or gas, they pump much more water, and they have to deal with that and also the tailings treatment in Canada is pure water treatment or impure water treatment to a better water.

So this table gives you a good picture how we see the role of the five main businesses from our own point of view and then think of how you analyze us.

Accelerating things and going to the marketplace, we announced in June that we'll form a growth accelerator unit. And Sampo Lahtinen is driving there. You can see his credentials there, and we are forming this unit as we speak. And the idea is that if you think of commercial organization being out there doing the daily business, 80% and then launching new products 20%. It's not that efficient because the 80% tends to overrule the 20%. So these groups and this team's focus is to help the segments and agree with the segments, how they go at it 110% and not get disturbed with the day-to-day issues and so on. So buildup of that group is ongoing.

Then to our sustainability targets. We had CO2 targets announced already a couple of years ago. And then this SBTi Science Based Target Initiative came and started to be bigger and bigger. We didn't want to jump in immediately and sign a document without knowing and answering how are

we going to do it. So in June, we committed that we'll take Scope 1 and 2 down by 50% by end of the decade compared to 2018, which was our then previous verified sort of starting point. And obviously, the previous target was 30%. So it's quite an increase in ambition level.

The STBi organization has not yet given instructions and guidance to chemicals industry sector for Scope 3. We are measuring that. But since there are no common ways of doing that. So we're working with them and other organizations on how we can also set even better targets for Scope 3. Our ambition to be CO2 neutral by 2045 still stands.

And when I say we wanted to understand how we will get there? What do we need to do? What does it take? We looked into it, and this is very general, and you can talk to our experts more if interested. But you can see up top our Scope 1 and 2 emissions gone down nicely since 2018. And mainly, it's about energy, electrical energy in our case. There are other factors there like in some sites, we use natural gas for grading steam and these types of things.

But mainly, it's about electrical energy. And then Scope 3 is about the raw materials, and many of our suppliers are still working on that, what is the math they actually do, how they do it, and that's at STBi standardization issue too, then logistics is the other one. And those are the areas that we now have a road map on how we are going to drive these forward. Clear progress made in both areas.

So then next steps in our sort of bigger picture, which then Antti and Sergej will talk about more and Matt about R&D sort of side of it. So clear progress has been made and the operating environment is what it is. Next, we continue to drive the growth pockets, pulp, packaging and water treatment are the big ones for us. We accelerate our growth of new offering and applications driven upcoming series like bio-based areas and also textile industries, renewable textiles is coming up more and more. It's been there coming, but now it seems to be coming faster. Our chemistries and know-how can be applied there. It's a fiber-based business. And as said, scan for M&A opportunities especially in the water space.

So priorities continue to mitigate the disruptions that we're seeing. Our market strategic investments that are ongoing, we need to complete those and get them up and running. We want to also continue to be agile. I think we've been quite agile to surprising circumstances and then maintain our operational performance and really drive these new growth areas that you'll hear more today. We -- it's missing one there. But we updated our purpose statement some time ago. Chemistry with a purpose better every day. I don't know if that pages in the deck, Mikko. So there's a narrative saying what we've been doing, what is our role in the last 100 years in the society. And so please read it. I won't read the text as it's not here.

Anyway, it's quite well putting on what is our role here and the world around us and how we will take advantages of that. I will conclude my summary update here and ask then next colleagues to go deeper on that, but now we can Mikko, take some questions.

QUESTIONS AND ANSWERS

Mikko Pohjala - *Kemira Oyj - VP of IR*

Sure. Thank you, Jari. So we have plenty of questions from the audience online. But if we start from here, if we have any questions from the audience.

Antti Koskivuori - *Danske Bank A/S, Research Division - Analyst*

It's Antti Koskivuori from Danske. I would like to ask about the M&A opportunities in water treatment side. Could you a little bit elaborate on that, what you could be looking after?

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

Well, we've always said they can be geographical expansion. We are not present everywhere, but you need to have a critical mass as for that. It can be adding technologies to our portfolio and widening it and having more of share of wallet than from the same customers where we have excellent access to in water treatment, whether it's industrial and whether it's municipal. And here, even if we count the Pulp and Paper -- water treatment

into Pulp and Paper segment, it still has a need for wider potential technologies to add into our portfolio. It can also be deeper that we consolidate the market in the existing portfolio that we have. And I think that gives you a better picture and that much deeper is not very easy to go.

Antti Koskivuori - *Danske Bank A/S, Research Division - Analyst*

If I can continue a little bit on the potential targets, do you see a long list of potential targets or how you would describe that?

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

Well, we've identified quite a few targets, whether they're available and actionable and so on is yet to be seen, but that's what we are now working on.

Mikko Pohjala - *Kemira Oyj - VP of IR*

In the meantime, there was actually the same question from online. But there are several questions related to sort of more short-term outlook. So if we take here in between and then we can turn to the audience for even more questions. So you have done very nicely this year, mainly due to sales price management. So how do we see H2 in terms of price and demand to the extent we can comment on this?

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

Well, we'll probably say more in October when Q3 goes over. This is more of a long term, but fight continues, and we've been doing okay so far. But at the same time, I can mention that the short to medium term sort of risk levels have risen on availabilities, FMs, what happens this week this winter in gas and electricity in Europe and so on, which are on everyone's mind, that is there. If there's no availability for raw materials or services that we need, no pricing will help us.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. then there's a question related to 2023, and Petri will talk about sort of the factors to watch out for in 2023. But in general Jari, so how do you see demand going into 2023?

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

As I said, we have a couple of backbones. Water treatment is pretty sort of uncyclical and maybe more cycles come from the raw material price management side. So see that continues as a strong. I don't see very easily big disruptions that would change the legally mandated water treatment, whether it's drinking water or then wastewater, whether it's from industry or municipalities.

Also, pulp circumstances for the customers seem to be strong. They are pulp mills that are coming off-line. And there are different type of needs like fluff pulps and these type of things. There are no new capacities coming online anytime soon. Maybe UPM springtime next year in Uruguay, but how they then ramp up. As there's less and less printing and writing, being used, there's less and less circulated fiber out there. So pulp and water are looking at least in the big picture today, quite steady as long as availability of energy is there.

Then we'll see how packaging will start to go because especially industrial packaging. So if we stop buying toasters, they don't need to be pack those toasters. So that's something. But how big of a drop is that because for instance, the food industry, medicine -- medical industry and so on that uses a lot of packaging will continue to be there like water.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. And if there's a question from the audience, just raise your hand, and then I know the direct the microphone to you. But we continue from online question. So coming back to the M&A that Antti asked. So building on that, so how much firepower can you allocate for M&A? And is there a target size that we would be looking at?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

I'll leave that question to Petri for answering in his talk. So give you a bit of a picture because there's different type of tools that we can use.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Continuing from the online questions. So why are we not seeing any volume growth for Kemira considering its main markets are growing?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

We are seeing volume growth in pockets, but then we are seeing volume down in some other pockets. And if you have to do the math, then we're on the positive side. There was a big Finnish pulp and paper company that was on strike for 4 months in the beginning of the year. And then 1st of March, the Russian and Ukrainian volumes are out. So balancing those out, we are seeing also a slight volume growth in areas. Also, China has now with the COVID lockdowns, the volumes have been a bit down also there. But I'm not concerned of that when taking these anomalies into account.

Mikko Pohjala - Kemira Oyj - VP of IR

Good, good. There are several questions on how are we coping with inflation pressure. So Petri will talk about the business model slightly later. So we'll leave those questions for that. But maybe coming back to our supply chain, Jari. So have we seen any production cuts or plant closures by ourselves or by our customers recently?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

We have had some minor sort of missing a shift or something like that, which is not even extraordinary in a sense if raw material shipment hasn't come in. So you could say that, that has gone as normal. Energy has been there. Gas, we are not very dependent on. Logistics is still an issue. You know the river levels in Central Europe. So that's not only for us, but our suppliers where that has been an issue, and that's what our supply chain people, our sourcing people have been fighting on how to look at that.

Maybe as a downside, we have had to probably increase our inventory volumes a bit to have a bit more caution into that. But that has entered into our cash flow on top of the higher value of the inventory.

We have seen some pulp and paper companies curtailing for some time, days or something like that, their production mainly in Central Europe and in China. And the reason has been high energy costs, they use natural gas in their drying and in the sky high, they've been curtailing there. We haven't had to do that. We have had a good solid run, but let's see how this moves. Remember also, China is not only COVID and not only -- well, electricity is one, but the river levels are also there exceptionally much down. So hydropower is out, and that's why they are also doing tricks there to save energy.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. And then taking the questions a bit higher level. So there are several questions related to gas, but Petri will talk about this later on. So we take some higher-level strategic questions Jari for you. So if we start with our target of growing faster than the market, so what does this mean?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

Well, we've been -- I mean it's been now exceptional. I mean, first half, we grew what, 30%. So that comes from the prices. But generally, we could say that our single-digit project percentages are over sort of longer period of time. So we should beat that, and we have been beating that.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Then coming back to the sustainability targets. So we are talking about the SBTi targets, Scope 1 and 2 emission reductions. So do we have an estimate of the cost of that?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

We actually do, but basically, it's an estimate, but it would be maintenance type of -- and replacement type of investments that we would do probably anyway. So mostly run out equipment that we don't want to use anyway, for instance, burners for gas and then switch them to electric or other or biogas-based feedstocks. But I don't have a number. So it's not that significant at the moment.

Mikko Pohjala - Kemira Oyj - VP of IR

Then coming -- there's a question related to bio-based strategy, which Matt will discuss in a minute. But briefly, are we protected in terms of intellectual property rights on our bio-based strategy?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

I think we are taking as good care of that as the surroundings allow. We do less of recipe type of IPR. We do more of a process type of IPR on how to apply the product, but we can have -- or then we do how to make the product the process, IPR. But Matt can answer more there. But we're quite active in applying for new patents between 30 and 40 a year.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Any questions from the audience here in between? Good. Then I'll continue here for a second. We still have time. So in terms of CapEx investments, Jari, there are two ongoing CapEx investments. Any other big ones in the pipeline?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

Well, considering some, there are some smaller ones going on top of that. And Petri always covers our CapEx outlook in the quarterly. I won't go there, but no big change in that. Some inflationary and time delay, but nothing so significant that we'll move the needle in the big picture.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Yes. And there are further questions related to but this is something Petri will discuss at the end, so what is the CapEx outlook for the coming years. Good. We have time for one more question. Maybe then we'll move forward. So the question is, you've been very successful in pushing sales prices. So how much further can we go?

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

It's a painful process. It's not easy to go in a year or 2, third time to the customer to do that. Luckily, our customers are also doing well. So they've been able to move it forward. So they have had good demand. We met with some customers with Antti yesterday and discussed the general environment. And if situation allows, I think there's still more room, but we have to be very careful because now nothing maybe in some areas, flattening out, some going still up and some coming down.

PRESENTATION

Mikko Pohjala - *Kemira Oyj - VP of IR*

And as mentioned, there are several questions related to CapEx, gas, exposure and then sort of how we're doing with inflation pressures. These will be covered by Petri at a later stage, so no need to take them at this point. Good. I think we conclude with Jari, and then we'll give more color with the segments later on. But before we go into that, so we hear an update next on our bio-based strategy and R&D in general, and this will be given to you by our Chief Technology Officer, Matthew Pixton.

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

Thank you, Mikko, and good morning to everyone. Again, I'm Matt Pixton, Head of R&D for Kemira. And I've been with the company, I joined in 2016. I've been in my current role since 2018, and I'm based in Atlanta, Georgia in the United States.

If I look at R&D and I think about what are the key messages today, it's really two that I'd like to get across: #1 is that the current portfolio of projects has been delivering very strongly towards the bottom line, and we'll talk about how we're doing that in just a minute; and second of all, I'd like to highlight some of the things we're doing on our bio-based effort, how those are going to contribute, I think, in the future and kind of where we're going with that strategy.

So with that in mind, let me just remind you that R&D is a global organization within Kemira. We have about 250 scientists located in three different centers, one in each pole that gives us close access to our customers. And key deliverables for R&D include things like new products, and we introduced 18 new products last year. And somebody asked online, I think, about intellectual property. We have about 1,900 granted patents right now. And we typically do, as Jari mentioned, 30 to 40 per year, sometimes more, sometimes less. I can talk about the bio-based angle on that in a minute.

At a high level, if I think about what we do in R&D and what we're delivering, first of all, kind of what goes into it. Kemira invests about EUR 30 million per year into R&D, and that's about a little over 1% of sales. So that's sort of the baseline number. That's focused on things like barriers, polymers, sizing those types of product lines. We also have a lot of inorganic products where we have some activity, but fairly modest.

If you look at the plot in the middle of -- in the chart there in the middle of the page, this covers our new product sales. where new product sales are defined as products that have been commercialized within the last 5 years. So it's a rolling metric things go in and out every quarter. And we first exceeded EUR 200 million in new product sales in 2016. We were very, very close to EUR 300 million last year, actually EUR 297 million. I'm estimating that for 2020 (sic) [2030], we will be around EUR 325 million in new product sales for the company. So again, I'm very proud of that. I think it speaks to the strength of the portfolio and the delivery that we've had over the past couple of years.

All right. Then looking forward into our bio-based area, if you go to the right-hand side of the page, we have completed and are midst of lab evaluations and a number of new feedstocks and building blocks that are bio-based. Some of those are bio ourselves. But a lot of those are in collaboration with partners going to talk about two of those partners today, which are Danimer Scientific and International Flavors & Fragrances, and we'll go into a bit more detail on that in a minute. And then finally, I would say that collaboration is important to the overall organization, but especially in R&D and about half our projects are either in collaboration with industrial or academic partners.

To give you a flavor for the types of projects that are in the portfolio, I thought it would be good to highlight maybe three of them here. So the first one is a project we called ViviMag. This is about phosphorus reduction in wastewaters. As everyone here probably is aware, regulations on phosphorus emissions are getting more and more stringent and it's becoming more and more difficult for our industrial and municipal customers to meet those regulations.

So in conjunction with some industrial and academic partners, Kemira has actually introduced this ViviMag technology, which basically takes a soluble phosphorus that's in waste streams precipitates it as insoluble phosphate, which is then magnetically removed from the waste stream. That phosphorus can obviously be recycled to the fertilizer industry. And this current process is being piloted right now at one of our major customers. We expect significant progress and proliferation of this technology as we move into next year.

A second project I wanted to briefly talk about here is sizing and our novel sizing portfolio. As probably you're aware of it, sizing is a coating placed on the surface of paper that makes it resistant to water and grease. And we've introduced a new portfolio of products, both some bio-based, some fossil base, to give better performance here that have good recyclability and -- which allow our customers to get better performance from their products. Going forward, we're also focused in this portfolio on going to 100% bio-based solutions and those are currently in the works right now.

Finally, Jari mentioned sustainable textiles, and I would just mention here briefly that Sustainable Textiles is a growth area for a lot of companies. For Kemira, I think there's two major opportunities that we've identified so far. The first one is textile recycling at end of life, is being mandated in the EU in just a couple of years. And so there has to be a solution here. Kemira expertise in cellulose fibers and in fibers generally is going to be a big advantage for us to get into this market. And we have some opportunities to do that.

The second opportunity for entry is in producing cellulose fibers. So currently, cellulose fibers are typically made by dissolving cellulose in a very harsh chemical process which is not very sustainable. It generates a lot of waste and then it forms a filament. We're working with our partners who are taking finally ground wood fiber, the so-called micro fibrillated cellulose. And in a water-only base process, spin those into good fibers that can be used in textiles. Kemira is contributing to this by allowing those fibers to have the strength and the durability they need to perform in their applications.

So I said I'd talk about bio-based. So let's talk about our bio-based effort and what we're doing there. And to start off with, we started in 2019 with a baseline of about EUR 100 million in bio-based sales. Now when we talk about bio-based products and bio-based sales, the way we've defined it internally is products that contain at least 50% or more bio-derived carbon. So those are bio-based products. And again, starting from our baseline in 2019, our target is to get to EUR 0.5 billion or more in bio-based sales by the end of this decade. That is going to require, of course, that the inputs and feedstocks coming into our business also become much more bio-based.

So how are we going to go about doing that? If you start on the left-hand side of the page here, what you can see is the overall sales last year for Kemira. And really, those can be divided sort of artificially but into two categories. One is those that contain carbon and those that do not. So about a little over half our sales contain carbon, but there is a reasonable percentage of our products that contain neurocarbon. Those obviously are not a target for our bio-based efforts. However, I would say that a number of the products in that inorganic side of the portfolio are based on recycled or reclaimed raw material. So there is a good sustainability story even on the inorganic side of the portfolio.

So let's talk about the bio-based side and where we are and where we're going. You can see on the right-hand side of the page that we started EUR 100 million in sales. We're actually already hit EUR 200 million last year. And this was driven by some major capacity expansions in our bio-based sizing area. Looking forward, we expect that business to continue. However, there's no additional investment for another step change in the overall sizing portfolio. So we are going to need some additional new materials, new products that we don't have today that are going to contribute so we can get to the EUR 300 million.

All right. So how do we do that? Really, it's four attractive activity that I would say can contribute overall to getting to our bio-based target. And I'd like to talk just briefly about each one of these here for a second. So you can see them labeled there on the left-hand side. The first one is labeled one current portfolio. This is really just taking the current bio-based products we have today and selling more of them. And there is some incremental opportunity to do that. We're continuing to work that. That's mainly commercial with some R&D support type activities.

Track #2 is what I would call product conversions. And this is taking products that we're currently selling today that are fossil-based and converting those over to some sort of bio-based feedstock. I'll talk about that in a little bit more detail on the next page.

The third track and the 1 that probably will be the biggest contributor to the overall effort here is new bio-based chemistries. And by new bio-based chemistries, I mean materials that are bio-based that are within 0 to 5 years of going commercial and where you can take these materials and apply them in our markets and industries. Typically, this work is done with partners who develop those materials. And I'll give 2 examples of that in just a minute.

And then finally, of course, this is research and development. So we're always doing exploratory work. We're always looking at new building blocks, new feedstocks that give us an opportunity to deliver exciting new products in the future. I would say that the majority of activities in this bucket are probably 5 to 10 years from commercialization. And probably won't deliver that much toward the EUR 500 million target in this decade, but will be key to continuing our progress beyond that.

Okay. So with that in mind, let's take a look at track #2 and 3 in a bit more detail. So track #2 is the product conversion or the so-called biomass balance type products. Again, these are products which are identical to what we're making today, only they're coming from a bio-based feedstock. So for example, you can currently purchase propylene, ethylene, acrylic acid, acrylonitrile, et cetera, on the market that are produced with 100% bio-based carbon. So we take those inputs, put them into our business and can produce a product, which is then either partially or 100% bio-based.

Kemira was the first company to introduce cationic polyacrylamide that's bio-based for the water treatment market. We're currently selling that product to multiple municipalities. And we're continuing to work in this area to develop products for both the industry and water and the pulp and paper segments. Obviously, progress here is going to be driven by, number one, availability of these raw materials. And number two, they're pricing versus the fossil alternatives. Those are going to be key. It's also going to be driven by reputation and regulatory pressure. And I think we've all felt those forces as well.

All right. So that's sort of the path or track #2. Let's talk about number three. One thing I'm really excited about in path #3 is a product we call PHA or for you chemists out there that's polyhydroxyalkanoate. PHA forms a tough water and grease-resistant coating on paper. And PHA also has a very favorable sustainability profile in that it degrades very well in home composting and as well as in marine environments.

When people overeat, we put the excess calories on as fat. But when certain types of bacteria overeat, they store the excess energy as PHA. And depending on the bacteria, the PHAs can be slightly different. So there's opportunity to optimize the material here.

Starting in 2019, R&D formed a partnership with Danimer Scientific, a major PHA supplier and technical adviser. And following successful lab evaluations of PHA as well piloting work last year in '21, where we did coated paper, converted that paper into various objects successfully, we signed a commercial -- a long-term commercial agreement with Danimer. That was announced this year, I think, in May, that provides exclusivity to Kemira for the paper and molded fiber markets. We're very excited about that. We're also working with Danimer not only on the existing product, but we also have agreements with them to develop new products that will have expanded product performance. So that's ongoing as we speak.

Finally, I would say, in this year in '22, we've already had multiple paper coating and converting trials, most of which were attended by key customers. And there's tremendous pull from brand owners for these products. We're really under pressure, I would say, to get these commercial as soon as possible.

All right. And then let me talk about another building block that's coming in. A new bio-based material called alpha glucan. Alpha glucan is merely long chains of sugar. And those chains can be straight. They can have little branches on them. That can be adjusted based on a specialized enzyme technology that's been developed by International Flavors and Fragrances, who's our partner in this activity.

We started working with them in 2020. We've completed a lot of lab evaluations looking at what are the opportunities for this in both our Pulp & Paper and Industry & Water segments. And we've piloted this year already opportunities in both segments with good success. Going forward, one thing that will be required here for alpha glucan to go commercial is some investment in manufacturing capacity.

All right. I mentioned that we're also working with outside partners. And one thing I would say is, while Kemira has a lot of expertise and experience with our scientists, we gained a lot of speed by working with outside partners. As an example, you just saw two projects that are with partners, we typically are trying to get involved in these in the last 5-years of commercialization. As you're probably aware, launching a new product in the chemical business, it's a minimum 10 years and can take 25 years. And so that's a fairly long process. By partnering in the last 5 years, we essentially say 5, 10, 15 years of effort. And so that's something we're working on and we'll continue to work on as we go forward.

Finally, Jari already mentioned it, and I would just emphasize here, we're really excited about the growth accelerator. The purpose of the growth accelerator is to take projects, particularly our bio-based materials, that are currently ready to be commercialized that have completed a lot of their R&D evaluations and make those commercial and monetize them over the next couple of years. And this is going to be a dedicated unit focused specifically on just doing that.

All right. Well, with that in mind, I said at the beginning, I was happy about our delivery from the overall portfolio, and I'm confident where we're going with the bio-based effort. So again, if I go back to what we've delivered from the current portfolio, we've been growing the total number of new product sales significantly, especially in the last couple of years. We're going to exceed EUR 300 million this year, I think, almost for sure.

And on the bio-based side, we've formed strategic partnerships with multiple suppliers. I only mentioned two of them here. We have others as well. But those are progressing very well. We have products that are ready to commercialize. We have products that are finished technical evaluation and our need to go to customers. And I feel like the pipeline there is actually in good shape. And we're on our way to hitting the EUR 500 million target. And finally, to make sure that happens, the company has just recently organized this growth accelerator to take those bio-based products and deliver them to customers and deliver the sales we want.

So with that in mind, I would be happy to answer any questions.

QUESTIONS AND ANSWERS

Mikko Pohjala - *Kemira Oyj - VP of IR*

Thank you very much, Matt. Starting with the audience. (inaudible), go ahead. And then in the audience, while (inaudible) digests his question. So do remember you can type your question to the screen in front of you, and they will come to me. But let's start from here in London.

Unidentified Analyst

About your bio products, could you talk about what kind of pricing we are looking at in the future and margin profile? And then secondly, what does this mean to your SG&A, you were saying earlier that on your path towards EUR 500 million in so-called biosales, you're aiming to grow your sales efforts. So if you can just...

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

So I expect significant contributions overall to sales from some of these new bio-based efforts probably start in 2024. So if I look at kind of where we are today, customer evaluations and sort of closing the sales are going to be '23 bigger sales coming in '24. So that would be my expectation there. What was your first question?

Unidentified Analyst

First question was regarding pricing of these new products and perhaps the margin profile.

Matthew R. Pixton - Kemira Oyj - CTO & Member of the Management Board

Well, I mean, in terms of overall sales price, R&D doesn't set that. But I would say that we're targeting the premium market here. So these types of bio-based materials, they have unique performance characteristics. I'm not trying to go into low-value stores and coat their paper. We're going after major brand owners who have strategic reasons that they would like to purchase these products and where it gives them a marketing advantage.

Mikko Pohjala - Kemira Oyj - VP of IR

And maybe building on that, so we will soon hear a video where we talk with Mayr-Melnhof Kotkamills. They will talk a bit about the pricing, so how they see their customers. So some of them are willing to pay a premium, not all yet, but they expect that to change in the coming years. And this was the question that came from online for many of our participants. So really are customers willing to pay a premium. So this is the question that is coming from many different viewpoints.

Matthew R. Pixton - Kemira Oyj - CTO & Member of the Management Board

The other thing I'd say on that is, it sort of depends what product we're talking about. So with these biomass balance products where you have a fossil version and a bio-based version, currently, the bio versions are typically more expensive. So the question is, how much is the customer willing to pay? What kind of premium will they pay? This totally depends on the customer and how much value they can extract from that sale. So -- but currently, I would -- if I was going to throw out a number, I would say, 20% to 50%.

For the new bio-based products, there's not actually any direct competition. These are unique products, at least in our industry that nobody else is supplying. So it's really going to be about the performance of the product rather than sort of a cost game.

Mikko Pohjala - Kemira Oyj - VP of IR

Andres, go ahead.

Andres Castanos-Mollor - Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst

Andres Castanos from Berenberg. The new technologies, PHA, alpha glucan, they are brand new to you. I wonder if they will require CapEx investment on what threshold for return are you expecting to get on those?

Matthew R. Pixton - Kemira Oyj - CTO & Member of the Management Board

Okay. That's a good question. So the -- on PHA, Danimer Scientific actually has significant CapEx that they've invested already into PHA production. So they don't need any additional investment from Kemira to produce actually very large quantities they merged with -- I think it was called Oak Capital, a couple of years ago that brought in EUR 400 million in cash. And so they've been spending that as their CapEx source. So that's -- PHAs I would say it's probably -- no need for CapEx.

For the alpha glucan, it will require CapEx. We've got preliminary estimates on what that might look like. Obviously, it depends on the structure of how we want to do it. Do we do it ourselves? Do we do it in partnership with somebody else? So it's hard to comment specifically on profitability.

But I would say, just generally, we expect bio-based products to be as or more profitable than existing product lines. Otherwise, why we'd be doing them.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Maybe 2 additions here. So Petri will talk a bit more about the bio-based CapEx going forward. And then related to the margin, of course, when we have a scale-up period, then, of course, the margins could be lower, but ultimately, we're aiming for higher margins actually.

So we have -- if audience digests further questions. So there are a couple of questions related to the big picture, Matt here. So about the bio-based target of EUR 500 million. So is the target -- is it ambitious enough given that we have EUR 200 million already? And maybe you can talk a bit about where the growth has come from in recent years?

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

That's a great question. If you look at, we set the target in 2019 and already hit EUR 200 million by 2021, it sounds like, well, that wasn't too hard. But the truth is we already have some capacity investments in place that we're going to expand that and get that EUR 100 million there's really no easy opportunities internally to get another step change in that number. We really need new building blocks, new materials and new markets that we can go after. And so it is actually an aggressive target. It means we need EUR 300 million in new sales from now until 2030.

Now I think about the timeline of these types of products. We're currently sampling some key customers. Again, this is just my experience, but typically, they'll try it out in a few product lines for a year or 2, and then it will start really expanding. So I really think that the big growth or going to be in the final 5 years of the decade.

Mikko Pohjala - *Kemira Oyj - VP of IR*

And building on that one. So the remaining EUR 300 million that we aim to sort of have to reach EUR 500 million. So to clarify, is this about replacing fossil fuel-based products? Or is this sort of additional new growth?

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

Yes. Good question. If we talk about -- I talked about track #2, biomass balance products, those are just obviously replacing a fossil-based product. So that's a one-for-one replacement. But if I look at that track #3, new bio-based materials, these are new unique products to our company and actually new unique to the market. Those are going to be new volume for us. They're not replacing anything we have today.

Mikko Pohjala - *Kemira Oyj - VP of IR*

And if there are questions from the audience, do raise your hand. But otherwise, we continue with the questions from the webcast audience. So taking the next one related to regulation. So can you talk a bit about regulatory push in Europe and the U.S. to incentivize the use of bio-based polymers? So is there something we can actively do?

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

I hope so. Of course, regulatory is often a bottleneck in terms of speed. I would say that in the case of PHA, a lot of the regulatory work has been completed and a lot more is in progress right now. So that one is, I think, on a good track. And I expect that won't be a bottleneck to selling it into our markets. If I think about IFF product and alpha glucan, that one probably is going to take a bit more work as to what we can do to speed it up,

I think the real key to success there is involving our product stewardship and safety people early on in these projects and getting the work started early. Unfortunately, there's sort of a cadence to this activity that, at least in my experience, I have not been able to speed up by very much.

Mikko Pohjala - Kemira Oyj - VP of IR

Continuing here with the webcast questions. So the question is related to wood-based cellulosic fibers. So do you have a cooperation with Lenzing? This is the first question. And then the second one is, how do we then in general, share the success from our partnerships without going to the contract details?

Matthew R. Pixton - Kemira Oyj - CTO & Member of the Management Board

Yes. In terms of specifically who we're working with, I think probably right now, I'm not going to make any comments on that. But our contribution to this is really about making those fibers durable and having the strength they're going to need to perform in the application. So if you look at these sort of water spun cellulose materials, they're interesting, but not very tough. And because they were spun from water, if you put them back in water, they tend to redissolve. And so really, it's about supplying chemistry that can make that a robust product that can hold up over the long haul and textile applications.

The other thing I'd say on that topic is, I think the current aim of a lot of the companies in this business is not that they're going to have a 100% cellulose-based garment, so to speak, that they're making. But it's more of 50% or 70% of the material going into it would be bio-based with another 25% being probably something that's fossil-based like polyester, for example.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Continuing -- this is related to capital intensity. So how did the bio-based products sort of compare with fossil-based products? So maybe here you can talk about substitute as a drop in chemicals or substitute chemicals. So that's clear for our audience and listeners on the webcast.

Matthew R. Pixton - Kemira Oyj - CTO & Member of the Management Board

Yes. Well, obviously, for the drop in chemicals, also no CapEx requirement from us because we're getting those from external suppliers. But in terms of bio-based materials, again, with the Danimer situation, they've invested the CapEx. We're just getting product. So the CapEx intensity there for us is fairly low. For alpha glucan, again, I'm not going to say the specific numbers here, but we've looked at it and it's, I would say, in line and very similar to the CapEx requirements of our other petrochemical-based processes.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Moving forward with the webcast questions. So can you sort of tell a bit more about why have we decided to partner with so many companies? So what is the rationale behind here?

Matthew R. Pixton - Kemira Oyj - CTO & Member of the Management Board

Yes. That's a great question. So let's just give an example here. Let's talk about alpha glucan, let's talk about PHA. So Danimer actually didn't start PHA work. They purchased this technology from Procter & Gamble, who had spent about 15 years working on it. And then they took in their technology and have been developing it for the last 10 years. So if you think about that, 25 years of work has gone into developing this PHA for the market. Our goal, as I mentioned, is to get in, in the last 3 to 5 years and partner with people that are going to be successful and then apply their products in our industries.

And as you can imagine, there's huge cost savings for us in terms of developing that way. I expect IFF is a similar situation. Again, this is a DuPont technology. They spun off IFF or sold it out to IFF a couple of years ago, but again, they've spent almost 15 years working on this enzyme polymerization process, developing these enzymes, developing products. And we joined them in 2020. We've only had 2.5 years into our belt and we're already talking about building a commercial facility. So I would say just in general, it's really about speed and getting to the market more quickly rather than starting a 20-year process.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. Then still a couple of questions. So we talked about the pricing. But if we think about sort of input costs, so how does the sort of pricing compare in terms of bio-based products versus fossil-based products? Any sort of rule of thumb that we could give, of course, this depends quite a lot from product to product?

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

Yes. That's a good question. Typically, in the chemical process, there's a high conversion. In other words, if the raw materials going in, 90% to 100% of it kind of ends up in the final product. For bio-based products that is not always true. So in a lot of cases, the amount of input carbon, only a fraction of it ends up in the final product. For PHA-based products, that number is 50% to 80%. So that one actually for a bio-based product has pretty good conversion. For the alpha glucan product, it starts with just table sugar. And it's 100% conversion to the product we want. So well, I should say, 50% conversion because the other half is fructose, which is a side stream that we need to deal with. But the conversion in the processes we looked at so far have been actually excellent.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. Then sort of more general question. So you've talked about the bio-based strategy and how we sort of aim to develop those for our current end markets. But the question here is that, they are also very much being used in other products such as shoes or fast-moving consumer goods. So have we thought about partnering with other types of companies for example, Nestle or Pepsi to replace plastics that are used in their products?

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

Yes. Great question. So we're always looking for new opportunities. We actually have partnerships with some of the folks I mentioned. And we're always looking at replacement of materials. So I think that's going to continue. These bio-based efforts, everybody is interested. Everybody is involved here, and it's really -- the winners are going to be people that have good technology and have a way to commercialize it. And again, if I think about PHA, a lot of people are in the PHA business. They've tried to make it commercial, but very, very few have been successful. Danimer so far have been pretty successful. And I think that's the thing we need to look at here is the many options that are there, how do we pick the ones that are really going to deliver success to the company.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. Maybe a final question from the webcast, if there are none here. So you mentioned that sort of things in the chemical industry tend to take quite a long time. So are there any concrete actions that we could take as a company to speed up the bio-based strategy and it's development?

Matthew R. Pixton - *Kemira Oyj - CTO & Member of the Management Board*

Yes, great question. I would say internally to keep this speeded up is we need to complete the internal R&D and pilot evaluations on all of the bio-based materials that we're doing. And externally, it's really around working with our key customers, working with the new growth accelerator to speed commercialization and monetization of the products that we're introducing.

PRESENTATION

Mikko Pohjala - Kemira Oyj - VP of IR

Good. I think we've exhausted the questions from the webcast. So we thank Matthew. Many thanks for the presentation. And then we move forward with segment. So next up, we have Pulp and Paper. This will be presented by Antti Salminen, who is the new segment head as of mid-August. But before I let Antti on the stage, so we'll watch a short video. So I interviewed Mayr-Melnhof Kotkamills who is one of our customers, a couple of weeks back, and then we will discuss sort of the trends in the packaging market in this video. So do take note of how much they emphasize the sustainability of their operations and their end products in this short, highlighted video. And after that, we hand over to Antti for the segment presentation. So we need to play the video.

(presentation)

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

All right. Good morning on my behalf as well. And as Mikko said, happy to be here in this new role. So for those that don't know, I was leading the I&W segment for the past 5 years or so. And now for almost a full month a head of Pulp & Paper segment. And I'm really excited to be here in this role. When I was studying in the Helsinki University of Technology in the early '90s, everybody was saying that Pulp & Paper is a sunset industry. Well, I can assure you that it's actually a sunrise industry today. And we've heard some of those points from Matt's presentation already regarding the new applications. And I will focus now on some of the things that I think are the most exciting and provide the most exciting growth opportunities for Kemira in the Pulp & Paper customer segment.

But I will first start with a few words about the past and current performance. And then really after that, move into the future forward-looking growth opportunities for us. So of course, I cannot take any personal pride on the results, but the segment that I took over has performed very well in terms of bringing in growth in the recent years and especially fighting the highly inflationary markets in the raw material side.

So we've been able to increase the prices with the input costs and keep up the good profitability that we have achieved. We have invested into this business into growth, meaning CapEx investments for the key product lines, and I will talk a little bit about that over the next slide. But then what we have also done very, very prudently is to work on the customer relationships. Because Pulp & Paper industry, of course, is about big major forest industry customers and building that key account relationship to those ones so that we are deep collaborating with them. As you heard from the customer video as well, their expectation is that we are supporting them from their product development phase and being in there with our chemistry.

And that is actually visible in our Net Promoter Scores or the customer satisfaction results, which have been -- you see in the green bubbles there, which have been increasing over the years. The latest measurement is 48%, which is way above any industry benchmark in terms of customer satisfaction. So with these customers that are really appreciating, again, as we heard from the video, appreciating our delivery performance and the technical expertise that we have at their mills. So this is one of the key ingredients of success in this industry.

Then as mentioned, we have been, over the years, investing into the growth in Pulp & Paper segment. So we completed last year a polymer investment in South Korea, which is supporting our growth in -- mostly in Asia Pacific, but also globally because these products travel quite well globally. And we are now in the process of ramping up the volumes for that plant.

Then we are currently finalizing an investment -- an expansion at our chemical island chlorate manufacturing facility in Uruguay with our customer, UPM-Kymmene. That's in the, again, heart of one of our focus areas, so the pulp production and growing with the pulp markets, as Jari mentioned in the beginning. So that we are expecting that to contribute financially starting from early next year. And then the third one is for ASA sizing, which is a product that goes into all packaging applications and paper and board applications. We are already the world leader in ASA capacity, and we've expanded further at our site in Nanjing in China and that investment is expected to be completed in '23.

So this is just to showcase that we have been as a company investing into growth in Pulp & Paper segment, and we'll continue to do so. And then really just completing this kind of historical part. So as you see from the recent quarter's results as well, there's been really, really nice growth driven mostly by the price increases, but also then sustaining the high margin levels that we've achieved over the years. And as Jari mentioned in the beginning, if you look at the volume numbers, then yes, it may look like there's not much tonnage growth but it's the balance. We lost significant volumes as we walked out of Russia. And there was this long UPM strike in Finland. So these both contribute. And then on the other side, if you look at deeper, there are also volume growth pockets in the existing business.

But then looking into the future, and this is the really exciting part. So Jari and Matt also already talked about the wood-based fibers and the future and the importance of those. So we all know that for the global warming climate crisis reasons we, as humanity need to let go walk away from the fossil carbon-based economy. And one of these solutions there is to go into a fiber-based economy. And I think this will be a major evolution over the years because what is a more sustainable renewable, reusable, recyclable material than wood-based fiber.

So cellulose and the derivatives, the new applications for wood-based fiber is major growth area in the economy, and there will be other applications that we even don't know about today there. So this means that basically, there's a lot of growth opportunities for us in Kemira as basically any new application for the wood-based fiber will be based on cellulose, pulp manufacturing, and we are really strong in providing the needed chemistry for any new pulp investments in the world.

Then much of the growth will be coming from further movement into fiber-based -- in the wood-based packaging. So that's the current stronghold and focus area for us. We've been growing a lot with the packaging industry. There will be new further growth opportunities there. But then there are these new application areas like the textiles, which I will elaborate a little bit more, and Matt already talked about that.

And then finally, we are planning to grow also on the service area. So not only being the chemical provider but providing digitalized services for our key customers in optimizing their processes. So we're really expecting growth from: a, the existing strong host that we have in pulp and packaging; b, from these new application areas of the wood-based fiber; and then thirdly, from the services. Those are the kind of future growth drivers for Pulp and Paper.

So first, these existing markets and our focus areas within the pulp and paper industry. So we've been heavily focusing on the pulp and bleaching market, which is expected to grow moderately. We are growing there with market. And it's important to understand, of course, that this is very CapEx-intensive growth. So anytime somebody invests EUR 2 billion for a new pulp mill, they need the bleaching chemistry for that, and there's no such capacity available in the world. So somebody needs to invest. And it's a major investment for us if we decide to go.

So we have a very selective strategy there. We are evaluating any new pulp project, and we are investing when it makes sense to us with the most sustainable projects in the areas where they are both financially and environmentally sustainable. So selective strategy there, but needing CapEx for the growth.

Now then on the board and tissue, again, packaging industry is driving the growth in the board. Tissue growth is driven by the increased standard of living in the world, more tissue consumed as the development economies prosper. And these are both growth markets within Pulp & Paper segment, and we -- during the last years, we've been heavily focusing into this. And as I mentioned, for instance, the ASA investment in Nanjing is supporting growth on this area.

This is growing driven by the packaging a bit faster than the pulp market. But in both of these selected segments, we are global #2. So we are among the very few companies that can provide and support -- provide the chemistry and support the customers globally, which gives us a really, really strong position there, also looking at these kind of new novel future growth opportunities.

Now then the really exciting part, as I mentioned, are these new application areas for the wood-based fiber. Matt talked extensively about the bio-based products, I will not go to the details of those, but there's a lot of synergies there and applications of those chemistries in the Pulp & Paper industry. But I will further elaborate on two points that Matt also took up. So the barriers and the wood-based textiles, and then talk a little bit about the services in the Pulp & Paper industry.

So barriers. As we all know, the first revolution in the Pulp & Paper industry kind of moving it from the sunset -- in the sunrise was packaging revolution, all the online shopping. But not only that, really, what is driving the further growth in the packaging is the moving away from plastic-based packaging because we need to replace the fossil carbon in the economy -- in our -- all of our systems.

So if you today go to a grocery store, you still -- a lot of your food stuff is plastic packed. But if you think about how big part of that was packed in plastic in 5 years ago compared to today, you already see the change there. And that change will accelerate. So more and more food stuff but also, of course, other stuff will be packed in fiber-based packages, be it then packaging board or be it then other forms of wood fiber used as packages.

Now the barriers are -- as Matt mentioned, a really important part of that revolution and change. Because if you pack something which is liquid or grease containing, the board itself will not hold it. You need the barrier that helps to retain the contents in the packaging. And historically, these barriers are polyethylene. And that's oil derivative. And the world needs to get out of those oil derivative barriers in the packaging if you really want to make the board-based packaging sustainable. And that's where we step in with the applications that Matt was talking about.

So we have already commercialized our first generation, partly bio-based barrier solutions, and we are at the brink of commercializing the next generation and there's more in the pipeline. So the idea is that we will be the leader in the bio-based barrier market, which will be huge in the future.

Now this about the packaging, then moving into the wood-based textile industry. Again, Matt mentioned about this already, but to put it in the context. So most of the textiles that we use today are either cotton or polyesters or a blend of those. And then there's some other fibers. But neither of these main fibers are anyhow sustainable. Polyester is again oil derivative, and then you've probably read and heard the stories about the global cotton value chains and kind of how much arable land is used for cotton cultivation how -- what are the working conditions in the places where the cotton is kind of the whole textile industry, it's really not sustainable. So you can say that 96% of the global textile market is unsustainable today.

And one of the most promising solutions to replace some of those fibers is again wood-based fibers. And there are different ways to produce textiles from the wood-based fibers, but some of the really promising start-ups both in U.S. and Europe, many of them in Nordics here in Europe are working in different technologies in basically producing a durable textile from basic pulp. And the beauty of these projects from our perspective is that, as Matt mentioned, you need chemistry to make the fiber durable and give it the properties that it can be actually used as any other fiber in the textiles. And that chemistry happens to be exactly the chemistry that we have in our portfolio already.

So basically, the chemistry and applications are pretty similar to what we do in the paper and board industry otherwise. Plus, that -- all of that is based on part, where we are strong, and we need to work on the kind of expansion on that part. Now this as well as the barrier thing, both are interesting markets for us because these are both brand-owner driven.

So if you look at some of the startups in the textile -- wood-based textile industry, they typically have investments and ownership or then long term financial commitments from the commitments from the brand owners like Adidas and (inaudible) and so forth. So all of these big brand owners or in the case of packaging, then the McDonald's and Starbucks of this world. The brand owners see that the sustainability drive is there, and it will happen. And that's why they are investing into these companies that are providing the sustainable barriers or sustainable textiles from the wood-based fibers. And that's why I believe that it's not only empty promises that these start-up companies are making, but there's -- the real economy is behind. It will happen because the brand owners have invested tens and hundreds of millions into this.

And now especially this wood-based textile industry, I see as a great opportunity for us because the growth if we are to replace globally, even say, 10% or 20% of the global textile demand with the wood-based textiles, that growth is huge. And we're expecting quite realistically, our business opportunity, the growth opportunity in this textile space to be hundreds of millions, not tens but hundreds or even to the extent of EUR 0.5 billion. That will, of course, then again need some new capacity from our side and so forth, but it's mostly known chemistry for us. So we don't need to go to that 25-year development cycle for the chemical applications. We can do a very high degree, utilize our current chemical portfolio and just invest into additional capacity in our existing production lines. So I see this as a really big growth opportunity for Pulp & Paper.

And then finally, the third key growth area are the services. So we've been always providing service to our key customers in Pulp & Paper industry. But what we have been now investing into is that, first of all, we have set up an organization internally within the segment, which is specializing on the service sales. And then we have -- we collaborate very closely and have invested into some start-ups in the digi space.

So basically, we are providing artificial intelligence-based optimization support for the pulp and paper producers. And we have several commercial cases already and the customers are ready to witness that we have achieved energy savings. We have achieved better runability of their mills and improved quality of the end product.

So this is another growth area and a nice growth area in that sense that it doesn't require capital investment. So this is really coming from the services, and we have set ourselves a midterm target of growing it to EUR 50 million, but I personally see that in the longer-term future, something in the range of 10% of the Pulp & Paper segment revenues will come from the services one way or the other.

And the nice thing about growth in the service is that this is a really sticky business model. If you're that deep in the customers' processes and support them, that gives you a competitive edge compared to the competition there if they are purely a chemical provider. So it's more difficult to kind of replace our chemistry with other chemistry if we are that deep collaborating with the customer there.

So all in all, as a summary, I think we, in Kemira Pulp & Paper are in a really great position to benefit from this fiber-based economy. We have long history -- in there, we have the broadest product portfolio in the world, serving the Pulp & Paper industry. We have these long established customer relationships and the customers are appreciating it, as you saw from the Net Promoter Scores. And we have a global service capabilities organization in every corner of the world to work with the customers there. So I think we are in a really good position to benefit from these future growth opportunities there.

So going forward, of course, we need to still continue focusing on fighting the inflationary environment and work with the price increases. We need to capitalize on the investments that I talked about here, make them run with the fullest possible utilization. But then we really need to look into the future and invest our resources into the growth opportunities on these new application areas as well as in the existing packaging focus market for us. Thank you.

QUESTIONS AND ANSWERS

Mikko Pohjala - *Kemira Oyj - VP of IR*

Many thanks. Antti, we have a bunch of questions here online, but anything here in the audience, a couple. All right. If we start with Andres.

Andres Castanos-Mollor - *Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst*

The first question is about current sales into barrier products. Do they represent about 15% of the total group sales, less than that, more than that? Can you give us some education?

Antti Salminen - *Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board*

Again, we don't disclose this kind of information, but it's relatively small. I mean, the majority of our sales come from the bleaching chemistries for the pulp and then the classical sizing and other applications to the Board. So it's a relatively small share of the current portfolio.

Andres Castanos-Mollor - *Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst*

The second is about the size of the opportunity that you can capture in textile. You mentioned the market size is about EUR 6 billion right now. How much chemistries in those products?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

So if you think about the global textile industry, which is the kind of a EUR 6 billion number, so then a certain portion of that is then converting into the wood-based textiles, and nobody knows today. So I can say -- let's say that 20% of the global textile market in a few years will be wood-based. And then for that 20% slice of that cake, our chemistry applies. So basically -- and then again, it's difficult to say it depends on an application. But on average, these applications are more chemical intensive than a similar kind of a board and packaging application would be. So the only thing that I can say is that it's going to be a huge opportunity for us.

Mikko Pohjala - Kemira Oyj - VP of IR

Antti, go ahead.

Antti Koskivuori - Danske Bank A/S, Research Division - Analyst

Antti Koskivuori from Danske. About the service revenues and the profitability of those I mean how does that compare with the roughly 15% EBITDA percent for the segment?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

Of course, the idea is that the profitability is and will need to be higher than the base business. The key thing though is that we're not selling the services if we are not the chemical provider. So yes, very profitable EUR 50 million or EUR 100 million 1 day. But of course, in the big picture, it's still a small revenue. So the real beef is the combination of our chemical sales and the service package with it.

Antti Koskivuori - Danske Bank A/S, Research Division - Analyst

Is it also the service business -- is it should we think that's a very scalable in terms of profitability or?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

There are more and less scalable elements. So then, of course, some of the traditional services that we have done in the pulp and paper industry require our technical experts to go at the mill, maybe even be there constantly present. So that's, of course, not very scalable business model because it's dependent on the call that you have there. But especially this same analysis collaboration that I mentioned. So we have sensors, we have soft sensors, hard sensors, we have remote monitoring, and we have the AI part there. So that is very scalable. I mean it always means that you need to really kind of tailor it to the customer in question and the processes. So the startup takes some labor. But after that, it is scalable model.

Mikko Pohjala - Kemira Oyj - VP of IR

Harri, go ahead.

Unidentified Analyst

(inaudible). I was wondering about the new barrier applications in food consumption. How lengthy are the regulatory or safety approvals needed if there is a new application introducer?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

As Matt already commented, so those are typically very lengthy, but we are in good situation that for some of these -- the hard work has been done already. So we're not expecting a kind of multiyear delays because of the regulatory processes anymore with the applications that we are now commercializing. But yes, in general, those can be very lengthy.

Mikko Pohjala - Kemira Oyj - VP of IR

Here in between, we can take a couple of questions from the webcast orders. So there are a number of questions. So if we start from the textile market Antti. So what kind of -- so what current products can we use their high level, you have to go through all the details. So my understanding is the relative use of chemicals in textiles is high versus packaging and board?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

So of course, I mean, again, everything starts from the pulp and the very normal bleaching chemistry goes into there. And then when you talk about the textile spinning processes themselves, you need basically the same strength and retention chemistries that we are using for the board or paper production.

Mikko Pohjala - Kemira Oyj - VP of IR

And how far in the future do you think this opportunity is?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

I think it's -- I mean, if we look at the companies working really on this textile opportunity, so they have announced or are building their first commercial facilities as we speak. So the kind of first volumes will be available and are already. I mean, you can -- I think Adidas has already kind of launched a track suite model that is kind of 25% wood-based fiber or whatever. So basically, the first commercial textile producers are out there and will be next year and year after. And then -- so the opportunity is next year for us but it starts small. And then the scaling up will happen depending on how fast they can scale up their manufacturing technology and how fast the brand owners are actually pulling it. But it's really kind of behind the corner.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. So in some way, it's more like wet strings distrain points like AKD Wax. But then continuing on this topic. So do we have any official partners who we are partnering with to target wood-based textiles?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

Yes, we have some partnership. But again, nothing that I will talk about here.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Moving forward. So there are a lot of questions. We have 5 minutes here. And if there is anything here, so do raise your hand. We'll leave some of these questions to the concluding Q&A. What if I take -- let me have a look. So we will start from the basic question. So wood supply, so what do you expect this to be somehow impacted by sort of a climate change increase in forest fires? Then secondly, Russia. And so will this have an impact on the wood supply and then on our business?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

So yes, not claiming to be any kind of an expert on that matter yet. But yes, of course, the climate change in longer term will have a potential impact on that. The Russia, Ukraine war has had already immediate impact. So there was a lot of wood coming from Russia, which is now completely out of the question. And I think it will be out of the game for several years. So that has already impacted the wood availability. Of course, if you look at where the kind of big pulp investments are happening -- have happened and will be happening. That's really Southeast Asia, Latin America and then some here in Nordics because of the different kinds of wood fibers but the big growth is expected from this eucalyptus-driven pulp investments. And there, the Russia doesn't really have -- so it really impacts the kind of potential of future investments here at our home in Nordics.

Mikko Pohjala - Kemira Oyj - VP of IR

Good, good. Then about the competitive pressures. So some companies who operate in different regions might have a feedstock advantage given that oil and gas prices, for example, the Middle East are low. So is that impacting -- so maybe here, you can talk about sort of the importance of local production. So will that have an impact? So can sort of bleaching chemical production be outsourced to other countries?

Antti Salminen - Kemira Oyj - President of Industry & Water, President, Pulp & Paper Segment and Member of Management Board

Well, first of all, in the bleaching chemistry, it doesn't really play a role. I mean the key ingredient there is electricity and electricity price. So that has the difference. But our strategy has mostly been to kind of select our key customers and support them. So we have bleaching capacity in Finland, and then we have built these chemical islands in Latin America. And then we have capacity in Southeast U.S. And we are kind of there, it all depends. The competitiveness depends on the relative electricity price. But then if we look -- think about the process of functional chemistry for paper and board manufacturing there, of course, these regional differences can be quite big. And that's why it is really important for us to be investing in Asia for the growth opportunities in China and Asia.

We already now see in many of the key raw materials, the U.S. and Europe are significantly more expensive in terms of raw material cost compared to what the Chinese market is. And it's important for us to be manufacturing in China from the Chinese raw materials to the Chinese customers. So that's again a key thing for us to -- or for everybody to understand that for most part, we try to be kind of regionally local in terms of the manufacturing and raw material base because it's not only about the raw material costs, but it's also about the logistics change and the vulnerability of those. So that's why building this local presence is so important.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. There are a number of questions, so we take this later at the end in the concluding Q&A. But now looking at the schedule, so there's time for short break now. So here in London, there's coffee outside Tina, if I'm not mistaken. And then if you're following online, so to keep you entertained, we'll show you two videos. So these two customer interviews, you will see in full length in the webcast, but we will continue at 10:50 U.K. time, so in 15 minutes. See you soon.

(Break)

PRESENTATION

Mikko Pohjala - Kemira Oyj - VP of IR

All right. Welcome back to Kemira's Capital Markets Day 2022. For the remainder of the day, so around 1 hour and 50 minutes. So we will still hear presentations from the other segment industry in water and then sort of also from our CFO, Petri Castrén, and then Jari, our CEO, will give you concluding remarks, after which we'll still have a concluding Q&A. So we aim to finish at noon U.K. time.

So next up, we have industry and water by Sergej Toews. But before we go there, so let's watch a short video also on this segment. And if we follow it online, so you saw the full-length version already but for the audience's sake, we'll show a highlighted version of the interview that I did a couple of weeks back with Käppalaförbundet which is one of the largest municipal water treatment companies in Sweden. So this interview will discuss the trends in the water treatment market particularly they talk about energy efficiency and tightening regulation. After the video, we will move to Sergej's presentation. And with this, we play the video.

(presentation)

Sergej Toews

Thank you, Mikko. Now these were some really good insights into what our Industry & Water business is all about. Good morning. Today is an exciting day for me personally as we will speak about what is very close to my heart, sustainability, water and how we will accelerate our growth in water.

Now as long as I have your full attention, I would like you to remember three things: First, our business fundamentals are strong. We are able to drive performance despite challenging raw materials and utility costs. The demand for our products is resilient over the economic cycles; secondly, there are -- water market is an exciting market with very exciting trends favoring our business; and thirdly, we are accelerating our growth -- sustainable growth in water treatment. But before we go into the future, let's have a quick recap over the recent development.

Now over the past few years, we have been steadily improving our business, growing revenue, increasing profitability. And at the same time, especially increasing customer satisfaction to superior levels, customer satisfaction and customer loyalty. Looking at our business fundamentals. As mentioned, our products are essential for the society. When it comes to clean water -- clean and safe water, reliable and efficient energy production, then our products are essential and therefore, our business fundamentals are strong.

Now let me spend maybe a bit time on the customer satisfaction and how does it come that customers have been improving the relationship with us. Well, one of the main reasons is the excellent supply reliability. Our customers are operating in areas that are very critical to the society. Their processes are very critical for clean water, supply reliability is key for them. Now our close proximity to the customer with a local manufacturing network, we are able to ensure that we deliver on the supply reliability. And that is an important factor.

And very recently, we have been expanding our capacity in the local markets. So in the U.S., where our products, where we are a leading supplier of products that are needed for efficient energy production from shale, oil and gas. We have been expanding and introducing a state of art polymer facility. Here in U.K., where new regulations being introduced to increase the affluent water treatment quality. We have been expanding our water treatment product capacity in order actually to ensure that there is enough product to comply with the new regulations that is being introduced.

Now both of these expansions are right now in the ramp-up phase and naturally also contributing to our organic growth that is visible in the quarterly numbers. But let's look into H1 performance and a bit deeper. And let's start with water. Well, typically, water is a very resilient and very stable market. But the numbers I'm showing here are actually demonstrating quite impressive growth figures. So Q2, 27% growth, impressive. Of course, we are living at this time in very exceptional time of inflationary raw materials and utilities. So a big part of this is coming from increasing prices in order to ensure that we are able to stabilize our profitability and mitigating the effects from the raw materials and utility, especially at the same time.

Now if we look at oil and gas, then we're operating in three businesses: Oil sands tailings treatment; chemical enhanced oil recovery; and shale. Well, by nature, chemical enhanced oil recovery and oil sands tailings treatments are more stable, while shale is more volatile. But shale at this time is in the recovery phase driven by the energy demand both from local U.S. but also increasingly from Europe. And that is supporting the recovery also and the demand for our products.

Now let's look into the future. When it comes to clean water, efficient energy, then our products are essential for the society. In energy production, we are enabling our customers to significantly reduce their carbon footprint and reduce their fresh water consumption and Oil & Gas production.

At the same time, many countries are seeking for energy independence and -- especially those with old and efficient reservoirs, and our products are typically then the only way to support them with chemical enhanced recovery or with shale.

In water, we are enabling efficient and reliable clean water supply, as mentioned already couple of times. But I will mention a couple more times, just to remember it. We help our customers to comply with advertising regulations like here in U.K., regulation is increasing, if we would not be expanding the market would even be undersupplied and regulations could not be met, right? Then we also help our customers, as mentioned in the video interview today, reduce energy consumption. One of the big important factors today. And at the same time, increase actually the biogas production, which today is more important than ever before.

All right. Now on the next 2 pages, I want to spend a bit more time with you and go really a bit deeper, what are the trends that we are looking at in water and how do they help to drive our sustainable growth story. If we start with energy efficiency and process optimization and water treatment, both elements that have been mentioned in the interview by our customers. Well, here, the most important trend is to optimize the customer water treatment process, and this is what we are able to do with digital advanced water treatment solutions. So basically, using the same process, but making it a bit smarter is typically providing a good lever on energy savings, so less electricity is needed and at the same time, increasing biogas. This is one of the major trends that has been growing over the past years, and we have been developing the first products yet. But on the next slide, I will cover a bit deeper how we're going to address this trend.

You might ask what does phosphorus recovery all about and why is that important. Now we heard also in the video that from -- it was spoken about wastewater treatment facility to resource recovery facility. Well, this is exactly about this. Phosphorus recovery in reuse. Phosphorus is a very important fertilizer and has gas resource, especially here in Europe. Europe needs to import its entire phosphorus in order to produce crops and food to feed this population. So without imports, there's not enough food and crops to feed the population. At the same time, most of the phosphorous ending its life cycle in the wastewater stream. So now if we can recover it from there and make it again available as a fertilizer, this would make Europe geopolitically independent, at least on this resource.

Now micropollutants removal is another important trend, what's also mentioned in the video. Micropollutants are toxic substances -- toxic cancer-causing substances that are coming from different sources, can be pharmaceutical residuals, can be coming from pesticides using in farming, all of those ending up in our water sheds. And with increasing populations, continuous lowering levels of water, this concentration of toxic pollutants is ever increasing, reaching critical levels where governments around the world, as we speak, are establishing new regulations. And actually, our customers, so the same customers that we serve today, as we speak, are vetting different technologies to understand what will be the technology that they should introduce to their water treatment process in order to be able to remove the substances from the water.

We still on the same slide. So -- but APAC is the last important thing that I wanted to mention from these trends that are above our current main markets. And those of you that have been following us for longer will recognize that we have been speaking about water trends in APAC and in particular China for the last couple of years. But with every 5-year plan in China, water treatment has been becoming more intense regulated, more and more intense regulated, favoring actually us. And if I take a couple of those, it started with sludge dewatering regulations, which is one of our core businesses, helping our customers on sludge dewatering. Wastewater standards, drinking water standards, again, one of our core businesses here in our mature markets.

And then moving over to water treatment manufacturing standards and also how -- basically, on the manufacturing corporations and what the product should look like, how the product should be qualified. Also regulations that are helping us in order to -- how to say, to introduce more and more a clean playing field for high standard manufacturers in this part of the world.

Now participating in this growth trends, as you can see, will actually increase the underlying growth profile of our markets that we are participating by 2x, so basically doubling our underlying growth profile of the markets.

Now let's speak a little bit what are we doing in this particular trend and why is Kemira is the best in order to build its growth story on this particular trends in water. All of these trends are close to us, close to our products, applications and expertise. In our current products and applications, we have a very strong customer base. We are a market leader. And all of these trends are affecting exactly our customer base. So meaning that everything that is happening there is very close to us.

Now we will address these trends in differentiated ways, naturally. Some of these trends, we are addressing through cooperation and partnerships like on phosphorus recovery, which is #2 here. Here, as Matt Pixton has been already introducing to us, we have been teaming up codeveloping the technology called ViviMag, which, as we speak, is being piloted together with Veolia.

On some other trends, we will focus more on partnerships and acquisitions. For example, if we start with micropollutants, here some technologies do already exist. There's a market for technologies, but the new regulations will boost the utilization of these technologies, brand reputation. And basically -- this is a very complicated picture for the first, and I don't want to get lost in the complicated process that you see here on the picture. But I want to emphasize that actually, our digital application is helping to optimize a very complicated water treatment process. And what I want to emphasize here is that with our KemConnect PT application, which is part of our KemConnect platform, we are -- which we have been introducing very recently, we are able to reduce the energy, meaning electricity consumption of a water treatment plant of this particular customer by 30% and at the same time increase the biogas production by 17%.

Now this is exactly what was also mentioned in the interview. And before, it was a strong driver. The strong driver here was sustainability, CO2 emissions -- reduction, now it comes also with a strong driver to reduce costs for the water treatment operation.

Reducing carbon footprint is bringing us also to our Oil & Gas business. The main trend we see here is carbon footprint reduction in the Oil & Gas production process. And basically, all of the major Oil & Gas companies over the last 1 to 2 years have been introducing very strong carbon footprint reduction targets in their strategies.

Another trend is energy security and independence, and as mentioned before, is a very important topic, especially today, many countries are looking to become energy independent. So the method of choice here is shale or chemical enhanced or recovery.

Now here you see to what degree our products actually enabling to help the customers in Oil & Gas production to reduce carbon footprint and at the same time reduce the fresh water consumption, which is an ever-increasing topic. And I think the numbers speak for themselves quite significant. When it comes to tailings water treatment from oil sense operations, then our product enabling the restoration of the nature. So basically, the trend here is that after the oil sands operation, the nature needs to be restored to the state as it was before and our products are enabling this.

Now this is basically coming to the end, summing up. Of course, mitigating further inflationary environment is our everyday job at this point in time. In Oil & Gas, we are increasing further our profitability. We have a new plant that is ramping up. We're utilizing it further, supported by the global energy demand. And we have some prioritized growth areas, and I have been explaining these are more the M&A type of areas. But now to sum up, the 3 things that I want you to remember is that we have a resilient business, we have a solid demand over the economic cycle for our products. Water treatment is an exciting trend, and we are investing into water going forward.

And with this, I catch a breath and turn over to Q&A.

QUESTIONS AND ANSWERS

Mikko Pohjala - *Kemira Oyj - VP of IR*

Thank you, Sergej. Good. A number of questions from the audience on the other side. If we start with the question, any questions yet here, you may digest for a while, well, Sergej catches his breath, and we start with micropollutants. So if we start from our current product portfolio, so what can be done with them in terms of micropollutants already?

Sergej Toews

Right. So if I would separate micropollutants into 2 major categories. So those that I mentioned and microplastic pharmaceutical residuals and all sorts of toxic cancer organic substances and microplastics. Then in microplastics, we have been conducting some studies, which are showing very effective removal of microplastics from the wastewater treatment streams with our existing products. So that is already here, we can support. And

when it comes to micropollutant that I mentioned before, then here, more different technologies are already in the market like ozonation, activated carbon. Here, we are looking more into technology access.

Mikko Pohjala - Kemira Oyj - VP of IR

And the follow-up to this question is that the cleaning up of micropollutants, would that require a complete change in the current water treatment process as we know it?

Sergej Toews

Well, it would typically mean in addition to the current water treatment process. So it will be an add-on that is further improving the water quality. So one additional step.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. And there are a lot of questions related to this still. So what is the challenge currently in sort of micropollutants? And does the current process for water treatment fail at this? So you partly already answered this one.

Sergej Toews

Yes. So basically -- exactly. So the current water treatment process is not sufficient enough to treat to the detection levels. We are always improving detection levels basically and to actually treat to the detection levels that are currently known and possible. And the uncertainty here is the finding state of regulation. So all of the regulations be it now in U.S. by the EPA or in Europe are being defined right now.

So there is tests underway in order to define what will be the level? What particular substance needs to be removed to what level. And I think that is uncertainty, and that is what needs to be then solved.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Then related to regulation. So how does tightening water treatment regulation impact Kemira, particularly at the EU water reuse regulation? Do you expect that to have an impact on us? Just before you start -- so there is a slide in the appendix of the presentation. So there's more clarification there, if you want to have a look, but I hand it over to Sergej.

Sergej Toews

Yes. Well, generally speaking, in water treatment, our majority of our business is based on regulations. So whatever additional regulation is happening and being introduced is favoring our business. That is a general answer. And for reuse regulation, it will also favor our water treatment products business.

Mikko Pohjala - Kemira Oyj - VP of IR

Moving on to the Oil & Gas market and business, so why haven't we seen a more meaningful pickup in the shale market and when it -- if and when it happens, so do we have capacity to meet that demand currently?

Sergej Toews

Yes. So for the first part of the question, while the shale industry is still relatively young, so maybe 10 years or so in the market, it is quite volatile dependent on the oil pricing and it has been fluctuating more severe than recently. So what has happened there? We have some good healthy oil price right now, but the shale industry has been also attracting more and more major players. So big players like Chevron and Shale and so forth. And these larger players are operating -- behaving in a different way. So they are also looking more for longer-term cash returns from the shale business. And therefore, this volatility is with every cycle getting more and more kind of slower maybe is the right word. So we see a pickup, but we see a more steady pickup, different from the previous cycle.

Mikko Pohjala - Kemira Oyj - VP of IR

And maybe coming to the capacity question, so we have this new facility Mobile in Alabama and that we expect that to be sufficient for the current market needs for the time being, so no additional investments in the pipeline at this point. Let me have a look Sergej, what is the following question. So this is more of a general question. So what is your main competitive advantage in water treatment? And how do you compare with competitors, maybe a summary of what you said at this time?

Sergej Toews

Yes, I think if I bring it really to the key points. So we are a global player with local proximity to our customers, and I think that is a key advantage and that is also what our customers favor more So we have best ability to move product around, make sure customers get product and also benefit from developments in different regions. I think that's the main thing.

Mikko Pohjala - Kemira Oyj - VP of IR

Any questions here in the audience. There are a couple of questions from the webcast that is related to electricity costs. This will be covered by Petri in a second and also related to the M&A strategy and capital allocation in more general. This will also be covered in Petri just a matter of minutes.

Maybe we take the final question from here before we'll let Petri take over. So more sort of generally, this is more on the margin, Petri can also expand on this a bit later on. So the margin has fallen in the segment since 2020. So what are we doing to improve that?

Sergej Toews

Yes. Of course, I mean, we are an exceptional inflationary environment, and we are shortening our checkpoints on pricing with our customers. And I -- so must give credentials to all of our salespeople, they have really the most tough job right now being out in the field.

Mikko Pohjala - Kemira Oyj - VP of IR

And for the sort of -- who asked this question for a consideration between the segments, so the formula-based contracts, Petri will talk about this. So that share is higher in pulp and paper. So if you compare those margins, that also has an impact. But with this, it is 20 past. We thank Sergej, and then we move on to the final presentation by our CFO, Petri. Petri, go ahead.

PRESENTATION

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

Well, good morning. You've heard exciting presentations about mid- to longer-term growth that Antti was talking about and Sergej was talking about also some of the longer-term prospects that Matt was talking about. In turn, I know that some of you are worried about what if Europe and global world is going to a global recession, so what will happen to that. So I will actually spend some time actually explaining why our business model is quite resilient proof, and we have some historical evidence on that, too.

But basically, it boils down to 2 facts. One is that the end-user demand is quite predictable. Most of our products are used in consumables. So whether they are water treatment, like Sergej was talking about, very steady and predictable or even Pulp & Paper, the process uses in the Pulp & Paper, the volumes produced are actually quite steady. And it's very important to remember that the driver for our revenue is the volumes produced by Pulp & Paper producers, not the price of their end products. And there's a very relatively narrow band how the volumes are actually changing.

And then we've already talked about this lag that we have in customer contracts. And indeed, it is a higher share of this annual and longer-term contracts that is in the I&W, so that's why that is -- has been putting pressure on I&W margins as it takes some time before we get to the next pricing point. But should we go into a recessionary environment, typically with declining raw material prices then that headwind actually turns to some short-term benefit.

Finally, I will spend some time talking about energy. Our gas dependency are relatively modest amount of that and then also explain a bit more about the electricity producing assets and the competitive value that's there. But let's recapture. So we've gone through 2 years of unprecedented cost pressures. And the key thing is here is that we are now starting to see signs of moderation for those cost pressures.

Oil price is already well down from its peak. The futures when you look at oil prices as volatile as they are, seem to be clearly indicating downward pressure versus some of the historical peaks. Some of the oil derivatives like electrolyte, nitrile, propylene prices are coming down. And we have seen some recent evidence of even logistics costs, the supply chain problems easing off and reduction on the pricing pressure there.

Now energy costs will certainly be a question mark, particularly near term, this winter, possibly a bit longer. But again, I'll come back to that, and we have a relatively good story there for us. So in that sense, what we are seeing, there will be -- we are seeing signs of moderation on the variable cost side.

Fixed cost, certainly we're going into a higher inflationary environment. So we will see salary increases, but the share of our -- on our cost burden, the variable costs are significantly higher share than the fixed cost. So people are worried about 9%, 10% inflation. We've been living with 30%, 40% annual inflation in variable costs for the last 2 years. So I welcome the 10% environment from that perspective. All joking aside, but nevertheless, we've been experiencing significantly higher inflationary pressures, and we have been quite resilient -- an agility in terms of operating in this.

So you'll see the slide here indicating the dramatic unprecedented cost pressure that we have been on, but equally, I think good performance by our sales team that Sergej was applauding for a reason is that we've been actually been able to sort of shortened the lag. There is a natural lag of 1 to 2 quarters when sales prices lag variable cost increases. First, you need to validate that it's there. You need to go to your customers negotiate and implement new increases. So it's just naturally there's always a lag.

And then on top of that, we have a number of customers who have annual contracts. So absent of a real hard ship, you have to wait for the next pricing checkpoint. But we have been also utilizing our sort of global manufacturing footprint to -- in a way of -- to our benefit. We were talking about the regional differences in some of the raw material costs. There can be a way how we can lay and optimize and use that. But mostly, we've been able to shorten some of the pricing cycles by entering into this new formula-based contracts, and we have increased the share of formula-based pricing to something like 35% through the group.

Let's spend a bit more time here on the energy slide. So 2 takeaways here. One, our gas reliance is relatively modest. Seven of our plants in Europe use natural gas as trying or any significant way. So pre-this energy crisis, I didn't even follow the price of natural gas. And for the first time, maybe

1.5 years ago when the gas prices started I was actually surprised when this sort of came up -- this was a EUR 20 million cost in '21. Now it is more than about EUR 20 million in the first half of the year and second half of the year, it will be probably higher.

But in the scheme of things, when we have seen hundreds of millions of increase in raw material costs, the energy cost is relatively small for us. It is more relevant for some of our customers and some of our suppliers and I think there have been some questions about whether we've seen some curtailments. Yes, we've seen some curtailments, but they've been isolated short term or local in nature. So, so far, knock on wood, which that these have not had a material impact for us. And let's hope that, that will stay this way through the winter, which is likely to become more challenging.

But then I think the electricity assets, which we have, we own, are perhaps not fully quite understood. Currently, we have owned these shares of electricity producing assets in Finland, hydro and nuclear energy. And the assets that we have in our books currently are valued at EUR 400 million. We actually increased the value of those in Q2 reporting or half year reporting. We are actually also waiting quite eagerly Olkiluoto 3, where we own 4% of the production capacity to come online. And as people who are following it are noticed that after some difficulties, that trial period is going quite well.

But again, here, just to put numbers a bit more perspective, we list here that it's roughly 60 megawatts of power that is our share. But if you actually turn that into megawatt hours, which are then priced, that's more than 400,000 megawatt hours per year. So when you consider that we are getting that at production cost, you can use your own guesstimates or forward prices of what's the gap. But clearly, it's a quite significant asset that we have. And similarly, the existing nuclear and hydro assets are existing -- very valuable assets that we have, and we believe are providing us a clearly competitive advantage.

On top of that, on the sustainability topic, we are now in Finland, 80% or after Olkiluoto 3 will be 80%, what integrated into fully fossil-free, CO2-free energy source, so that will help our Scope 1 and 2 emissions as well.

Consumables, our products are consumables. And here we took a long-term view. And maybe the point about here is that we have gone through 2 major recessions during this, is it 13- or 14-year history that is here after 2009 financial crisis and then 2020 COVID year, doing both EU and U.S. clearly into downturns.

And what happened to our results, both years are absolute and relative profitability improved. And again, it comes from the fact that we do have this -- typically, we get -- I always have to be mindful, typically, we get this benefit when the raw materials are coming down, and we have this inherent lag in our pricing. So there is a good prognosis that should we go into a downturn, this will actually help us.

On the financial targets, nothing really new. We are committing to those. You heard about these growth opportunities that we have, Antti Salminen talk about clearly, took some -- you paid attention to that. So clearly, that's a huge and exciting opportunity for us. And for the other targets, we maintain the 15% to 18% profitability target. I'll talk about that next.

And financial profile, we're sort of defining at gearing below 75% for some of your others may be more comfortable with the leverage ratios. So probably around 2.5 less than 3x is a line where we're comfortable. If we were to see something really good strategic opportunities, this is not a covenant so we can go above that, but then we would expect that there is a line of sight how we come back to this sort of range where we also have some further and forward opportunities. So we don't want to use all of the ammunition all that once.

Talking about the profitability margin, so we'll continue to focus on customer profitability. And as we have done well, we are perhaps a little behind overall in industrial water in that. So clearly, we will need to continue some of these pricing actions. And again, evidence of that is just last week, we sent out a press release impacting all of Europe, EMEA, about general price increase where we are reflecting our prices because of the recent energy spike impacting our operations.

Efficiency of operations, obviously, very important that we get capacity utilized. We have some room to -- for example, there was a question to Sergej about our EPAM capacity for shale. There is still capacity in that line. So we are well positioned for growth, but we are also needing to fill assets. But also, we're looking at our product and business portfolio with sort of a very critical eye and where do we need to be and where we want to be.

And just yesterday, I don't know if you noticed, we announced that we are selling our colorants business. Colorants is a relatively small part of stand-alone business almost within Pulp & Paper. It is profitable, but it's not really growing business. And also because you need to sort of store and have inventory, lots of different color grades, it's quite complex to manage. And therefore, we made a decision to look for divestiture of that business and just yesterday, announced that we are divesting that business. And I believe that this business will be in a better home with a smaller company that is clearly focused on that business. So it's better for our customers, better for our employees for everyone. But it's just an example of how we are looking at our portfolio. And one -- and again, there should have been a drama if there's something else like that.

Then looking at our balance sheet, we do have a strong balance sheet, well-diversified debt portfolio, which is putting us in a good place to look at growth, whether it's the organic growth or whether it's some of the inorganic opportunities that Sergej and Jari were talking about. Debt maturities, like I mentioned, are well diversified by profile as well. We are looking at some refinancing activities within the next 12 months. But even in this rate environment where we are seeing increasing rates, it's not going to be dramatic in any way.

Our current interest rates are, I think, at the average is 1.6%. This will likely increase a little bit, but as the share of fixed rate loans is 2/3 and without leases, roughly half or slightly more than half, this will be a very gradual and that sort of nondramatic change as we look to further look the future. So clearly, our investments will need to be significant. We're looking at the investments that they are significantly higher return than any anticipated rates would be.

So talking about capital allocation. So I think here, the message is that we are clearly much better positioned for M&A. Our profitability is there. It's improving. We're also guiding improved profitability for this year. Our balance sheet is in good place, and we have a good strategy and good ideas of where do we want to grow. Sergej was talking about water, whether it's product or technology. It can be regional expansion as well. It doesn't have to be an acquisition per se. It could be partnership or JV or something else. So let's not look at M&A solely as a purchase of a company. It should be looked at in a broader context, but we are looking at inorganic opportunities.

And maybe we are going into a bit environment that is a bit more difficult that may give us a better valuation opportunity. Some of the recent or past valuations from a strategic acquirer have been quite, let's call it, robust in our view, and we have -- we will be prudent in terms of how we are using our financial resources.

Bio-based CapEx, there was a question to match on bio-based CapEx. There's a bit of uncertainty about the timing and the structure as we were -- as Matt was talking about. But in the big picture, this will be not a step change to our recent sort of CapEx frame. And let's call that CapEx frame EUR 200 million or slightly more per year. That is the way how we are looking at our long-term capital. So clearly, as those bio-based investments will increase, they will increase first in single millions and then some low dense -- they will need to fit into this. So it's not an addition to that. Dividend policy remains intact, so paying competitive and over time increasing dividend.

Finally, I'll talk about a bit near term. So what is there to watch for '23 and people are going out. We are working at -- or starting planning for '23. So again, I mentioned that there are some assets -- or Antti was talking about some assets that are coming online. So the Fray Bentos expansion, increasing our business in Uruguay.

We do expect that the market demand is solid for our end products in a big picture -- there may be some weakening and some areas of softness. But in the big picture, the end markets are quite solid for our water treatment and Pulp & Paper business. On the short term, there was again a question about shale. Why hasn't the -- the shale industry has been actually quite restrained, and they are looking at increasing investment into next year and obviously some of the fundamentals are clearly supporting that. So we are seeing growth opportunities in Oil & Gas. And as I talked about, the energy assets, we believe, are a competitive asset for us next year.

Uncertainties, yes, of course, energy, global economy, what is the type of environment that we are going to and the normal ones, FX and raw material and then we will be facing some negative factors. So the fixed cost inflation is here for sure, and we are already planning for higher inflationary fixed cost pressures for next year. But as I mentioned, it's a relatively smaller manageable problem compared to the variable costs that we have seen. And then, of course, the Ukraine -- war in Ukraine is a negative factor and let's all hope that it's just rather going to the right direction and the wrong direction.

So I'll stop here. I think I'll have some time to take questions and then before handing over for Jari for concluding remarks. So Mikko, are you managing that process?

QUESTIONS AND ANSWERS

Mikko Pohjala - *Kemira Oyj - VP of IR*

Yes. A bunch of questions online. Anything here, same procedures, just raise your hand. But if we start from online, Petri, relating to yesterday's announcement. So what is the size of this business? What is the time line? And will there be a sort of a gain related to the sale of this business?

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

Okay. Well, it was announced as a press release not as a stock exchange release, so it wasn't material, and we didn't disclose the values. I talked about, it's a relatively small business. But let's call it, it's tens of millions of revenues and the purchase price associated with that, no major gain on the (inaudible) for that.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Okay. And I recall the press release represented around EUR 50 million in terms of revenue. So in that ballpark, yes. M&A, a lot of questions. So on capital allocation. So is your M&A strategy -- will that be at the expense of gearing and dividend payout? So maybe a bit of background. So what is the firepower we have? And what's the priority? I think this is the question.

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

All right. I can give my take and then maybe Jari may want to give his take at the end because I think the CEO has a role there and the Board has a role. But nevertheless, so we are roughly 2x leverage -- around 2x leverage. And I mentioned that 2.5 to 3x is where we're comfortable depending on what we acquire and let's round up were 450 or whatever types of run rate on EBITDA. So that would give us 500 plus and depending on what we acquire in terms of profitability, types of firepower, so let's call it 500 to less than 1 billion. 1 billion would be -- I think, would be at the high end.

So this same question has been posed some years ago, I think then the guidance of the range I would have given was 300 to 400 or 300 to 500. I think that's why we are saying that we are in a better position. The firepower, the tool that we have, I believe, is greater than what we had some years ago.

And in terms of the prioritization of capital allocation, that's really -- I think we -- the Board will need to give you some thoughts in terms of the measuring against what is the strategic attractiveness of the given opportunity and -- versus touching these. So -- but everybody can do the math. Cutting dividend by a tiny bit doesn't do anything. So you need to do more significant and we understand that we have both growth and investors as our shareholder mix, but we also do have our dividend income-focused investors as our shareholders.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. Continuing on to sort of divestment part. So would you potentially have more businesses to be divested?

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

Well, we're not actively looking to divest businesses per se. But again, I think I said pretty explicitly that we are continuously looking at our business portfolio and see that if there is a rationalization opportunities. So I'll leave it at that.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Good. And a lot of questions previously also about gas. We've recovered these mostly, but just to clarify, do you see risk for your production from gas ration in Europe this winter, just to clarify this for everyone?

Petri Castren - Kemira Oyj - CFO & Member of Management Board

There are some sites, and those sites can be quite important, if not, even critical for water treatment sort of infrastructure locally that are using natural gas. So I would rather say that I think the officials who would be rationing understands the criticality there as well. So that's why I feel relatively comfortable that even individual sites will not be badly impacted for rationing. And secondly, in the scheme of things, I mentioned that it's only 7 sites or 7 plants in Europe and relatively modest financial burden on us. So in the big picture, we -- I believe we are much better positioned than many of our peers in the chemical industry, which is using natural gas, obviously, tremendously.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. And if any questions here, just raise your hand. But otherwise, I'll continue with the webcast questions. So a lot of questions surprisingly related to energy and electricity. And first of all, the electricity assets that we own. So are you getting electricity for product at cost? So maybe here you can clarify the Mangala principle.

Petri Castren - Kemira Oyj - CFO & Member of Management Board

Yes. That was a part that I -- in my script that I forgot to cover. So yes, we own the so-called Mangala concept. It's a Finnish term that cannot be -- I can't translate it. But it basically means that you are getting the electricity at production cost. So the Mangala [used to] such, is not a profit-making company. They actually target 0 profitability and that's the benefit. So we do get electricity from these assets at the production cost whatever their own production costs are and it varies.

And then perhaps another point, which I forgot to mention is that we also have a short-term hedging program where we hedge the open position. So 80% of the electricity are now backward integrated, the 20% is hedged. We have a sort of scaling down hedging program that covers the next 5 years. But for example, '23 is mostly protected.

Mikko Pohjala - Kemira Oyj - VP of IR

And building on this one. So in which segment are the electricity costs more relevant? So percentage of sales, we can talk about in general terms.

Petri Castren - Kemira Oyj - CFO & Member of Management Board

It's clearly, it's the Pulp & Paper segment. So the sodium chlorate manufacturing process, like Antti was talking about, is a very electricity-intensive process. It's basically, I look at now the term, but it's basically -- it's very electricity-intensive process. 60%, 70% of the costs are electricity.

Mikko Pohjala - Kemira Oyj - VP of IR

Still continuing on this one. So what are your long-term plans for your share in these electricity assets? Would this be a good time to sell and finance your M&A?

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

That's a good question. We have been owning these assets. And clearly, it has been a tremendous benefit for us in times like this. If you actually think about history, we -- maybe 5, 6 years ago, we did actually sell down some of the electricity producing assets at that time. So it's not to say that we will never, never touch them, for example. But right now, it's probably not the right time. Nobody is -- I don't think it's -- it would be very difficult to see a consensus between the buyers and sellers what's the forecast for next 5 years or 10 years of electricity prices. And if you are missing that, how can you come up with the value.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. We have a couple of minutes. One question from SAB. So if you stop doing price increases now volumes were to remain stable, so how long would it take before we saw the full impact of price hikes? So you talked previously about a couple of quarters. Anything to add here?

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

I don't think -- I have nothing to add. No.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. Final question, if there's nothing -- no more questions here. So how do you follow capital efficiency?

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

ROCE, or return on capital employed, is the key measure, how we measure on an ongoing basis. Obviously, when we are looking at new investments, particularly the type of greenfield investments, whether that's really critical, and we are looking at whether it's from the return on capital employed basis or whether we're looking at from the payback industry -- payback ratio point of view. So these are the key ways of how we are looking at.

And the simple math is -- a simple way is simply add capacity, add utilization rates and the chlorate business has been operating at near or near full practical or feasible operating rates. So that's a good example why high capital intensive investment or high CapEx investments can actually return very nicely. But you need to be able to make sure that these high CapEx investments are operating at high capacity utilization.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. I think we conclude this Q&A here. Finally, some concluding remarks from Jari and then we still have a final concluding Q&A after Jari. A couple of remarks from Jari and then we aim to end by noon.

PRESENTATION

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

So a lot of information today and excellent questions, as I spoke with some people before we started the Capital Markets Day morning that we can only give you a picture that we think you want to know. And then you need to ask the specific ones, and you've done a good job.

We have, as Kemira demonstrated that we are fundamentally stronger as we claimed 2 years ago in our Capital Markets Day and that's proven that we've been able to cope in these unprecedented situations and even take opportunities from that. So we have proven we have that capability.

In R&D and launching new products, you heard from all the 3 presenters, we have ambitious plans. And when we announced the EUR 500 million target, it was sort of like this. And now we're there where we start to be somewhere, and we can talk about already concrete progress. So we have that capability.

We have about 5,000 people in our organization, 250 of those, give or take, a few are PhDs, 5%. So we have that capability from a science point of view. By the way, out of 8 people in the management board, 2 people are PhDs. Our base business is in good shape. Yes, there are pockets that we need to improve, but there are areas that are doing very well. We have a good market position, water, pulp board are our strongholds. And there, we want to grow and strengthen ourselves, but obviously we need to take care of the base business.

The new markets and applications that were discussed bio-based textiles, you name it, micropollutants are a new opportunity, and we're in a good position of go after those. We have the great ability from the market that we are a player. Petri went through that we are financially solid, well-financed, strong balance sheet. You can see we have a strong team, the management team that I have, but also all the 5,000 people that can react and drive the business the way we want it to be driven. So I very much feel that we are well positioned and were fit for fight going forward. Thank you.

QUESTIONS AND ANSWERS

Mikko Pohjala - *Kemira Oyj - VP of IR*

Thank you, Jari. There's still time for some questions. We don't have time to take all the questions from online. But I said, so do ask -- raise your hand if you have questions, and then I'll take a couple from here from the webcast orders. But Andres, you had a question.

Andres Castanos-Mollor - *Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst*

Maybe one thing that I missed today. About the U.S., your presence in the U.S., which is very relevant. So can we have some words about it? How do you think about deploying capital there? And how you think about your water business in there? Yes, I would like to know more about the U.S. presence.

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

We're strong there in water treatment, especially municipal water treatment in U.S. and Canada. And it is doing really good EBITDA percentages even now. Yes, it's down a bit, but still it's well above the corporate average. We have also a strong pulp business there, where we are electricity-wise hedged, in a sense, through formula pricing, which over time works to sodium chloride plants there that are in good shape.

And then we are in the process and functional business, not only in North America, but also in South America. And South America, we have 2 other backward integrated sodium chloride and 1 peroxide plant, which we are expanding. So it is an important area for us in water, in Pulp & Paper and obviously, then shale and oil sands is there. So not treat it differently, but we always have more sort of investment opportunities that we need to look at strategically, but we need to also have them compete from a return point of view.

Mikko Pohjala - *Kemira Oyj - VP of IR*

In between here, further questions, do let us know. And sort of a high-level question, Jari. So given the geopolitical risks of this year, so are you worried about expanding in China and then having to deal with potential sanctions if the situation intensifies in the South China Sea and what this will mean for your future investments in that region?

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

Well, certainly, during the last 6 to 9 months, we have put a lot more attention on what's happening in Asia Pacific and what's happening with China, with the relations with Europe and U.S. So clearly, in our mind, no conclusions yet. But if I would be saying that I'm not more careful, I would be lying. So I need to be more careful at the moment. There's the dryness, the heat, the COVID behavior and then this potential Taiwan situation. So we need to be more careful.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Good. This is more of a question than, perhaps for Petri, related to the margin target. So can you comment or rank profitability of subsegments, Pulp, Board & Tissue, Printing & Writing, Water treatment and Oil & Gas, maybe directionally because we don't give exact numbers. And where do you see the biggest room to improve margins?

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

Very much directional comments only because this is the type of information we don't -- we are not really disclosing. But I guess at least those who have been following our webcasts and quarterly results know that while the Oil & Gas has been on the recovery, revenues are increasing dramatically in a very good way.

The pressure on -- from the raw material side has been quite significant, and we're not quite there where we want to be. So within Oil & Gas, it's clearly an area which we acknowledged that is if something is above target, something has to be below average. And traditionally process and functional business has been more competitive than the bleaching business or the balance in the bleaching businesses like Antti was talking about, there's a good balance between supply and demand, which results in relatively good returns on process and functional chemicals, easier that this balance is mixed or more on the supply side. So therefore, perhaps that directionally a comment on that one, but I think that's probably all I can say.

Mikko Pohjala - *Kemira Oyj - VP of IR*

Yes.

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

We can be happy with the water treatment business. That's -- well, it's a bit cyclical from the raw material side, but strong position and doing well.

Petri Castren - *Kemira Oyj - CFO & Member of Management Board*

And actually, maybe one more point. In bleaching chemicals, it's not the margin, which is the only target. I think because of the capital intensity, you actually need to look at the return on capital. So that's -- and business model even change. Sometimes you buy the electricity, sometimes you get the electricity from the pulp mill at a very low cost, but you actually need to look at really the return on the capital employed.

Jari Rosendal - *Kemira Oyj - Chairman of Management Board, President & CEO*

And [we dare to] talk about sodium chloride and simplify things, but we have 4 hydroperoxide plants, 2 in Europe and now a second one being built in or expanded in Uruguay. And then we deal with a lot of bulk chemicals like caustic soda. We imported and distributed here in the Nordics, but we're the only manufacturer of caustic soda also here.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. Nothing here in the audience. So maybe a concluding question from the webcast so -- to the extent we can comment. So how confident are we on H2 and next year?

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

We increased our outlook for the year in May, June. So I think that gives a direction next year, we'll talk about later.

Mikko Pohjala - Kemira Oyj - VP of IR

Good. And I think with this, we are exactly on time. So thank you here in London for participating also if you're following online. So many thanks for participating and your questions. And for us here in London, there will be lunch outside and for you on the other side of the screen. So thank you for participating and have a nice week. Thank you.

Jari Rosendal - Kemira Oyj - Chairman of Management Board, President & CEO

Thank you.

DISCLAIMER

Refinitiv reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES REFINITIV OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2022, Refinitiv. All Rights Reserved.