



Transcript Analyst Call Final Investment Decision

9 December 2021

Caroline van Reedt Dortland – director Communications Avantium:

Good evening everyone. Thank you all for joining and welcome to this evening's conferencecall. My name is Caroline van Reedt Dortland and I'm joined here by Avantium's CEO, Tom van Aken, and CFO, Bart Welten. We'd like to ask Tom and Bart to run you through the press release we issued tonight and after their introduction there will be an opportunity to ask questions. I'd like to hand over now to Tom van Aken. Go ahead, please, Tom.

Tom van Aken – CEO Avantium: Thank you, Caroline, and good evening everyone and thank you for dialling in at such short notice. As Caroline mentioned I'm joined tonight on the call by our CFO, Bart Welten.

We'll first give a short introduction after which we will open the line for questions. As always, we need to point out that this conference call may contain forward looking statements. You can find disclaimers about forward looking statements in today's press release via, of course, also published on our website.

Let me quickly run you through the press release.

First of all, I'm very pleased we announced tonight that we've taken a positive Final Investment Decision (FID) on the construction of our FDCA Flagship Plant. As you know, FDCA is the key building block of 100 percent plant-based recyclable plastic material PEF, which has functional advantages compared to fossil-derived plastics. Our Flagship Plant will be the world's first factory to produce FDCA on a commercial scale. I'd like to highlight this has happened not often in the chemical industry to commercialise a new monomer or a new polymer, and we're doing both. Therefore, it feels like a historic milestone.

Let me come back to our positive FID. We have now fulfilled all three conditions that we communicated for building the Flagship Plant: we have secured the financing; we've signed a term sheet for a three-year debt financing package of €90 million with a consortium of lenders. The consortium consists of four Dutch banks: ABM AMRO; ASN; ING Bank and Rabobank, as well as the Dutch impact investment fund Invest-NL. Each bank has committed €15 million as a bank loan under the debt financing. Invest-NL has committed €30 million of debt under the debt financing.



The three-year debt financing allows Avantium Renewable Polymers to construct, commission, start-up and operate the plant according to our plans. Also, it allows Avantium Renewable Polymers to sell out the Flagship Plant prior to start-up. At that time, the Flagship Plant is fully de-risked and on that basis we expect that we will be able to negotiate a more attractive debt financing at that moment in time. The debt financing documentation contains customary, commercial and technical conditions precedent and the customary security package, including, amongst others, security on all assets and IP of Avantium Renewable Polymers. Part of the debt financing is a warrant agreement with a consortium of lenders. You can see this warrant agreement effectively as a 'success fee' to the lenders because they will be able to exercise their warrants when the flagship plant reaches its commercial operation date. With issues of warrants for ordinary shares in Avantium NV to the group of lenders, Avantium requires shareholders' approval. We will, therefore, convene an Extraordinary General Meeting of shareholders to be held on January 25, next year.

With a debt financing package, Avantium has now secured a total of €192 million of funding to be used for capital expenditures, start-up costs and working capital. The other funding sources are grants, third party equity and Avantium equity. Avantium has agreed to invest an additional €10 million in equity in its subsidiary, Avantium Renewable Polymers, in order to absorb the additional cost of the one-year delay in coming to financial close. This brings the total equity investment by Avantium in its subsidiary to €45 million. Worley and the Groningen Consortium committed an equity investment of €10 million and €20 million respectively. Following financial close, together they will acquire a 22.6 percent shareholding in Avantium Renewable Polymers. This represents a post-money valuation of €132.5 million, and Avantium will hold 77.4 percent in this equity.

Now moving to the second key condition of the FID, that's the finalising of the engineering and establishing the supply chain. The engineering phase is completed and based on this the estimated capital expenditure for the FDCA Flagship Plant amounts to approximately €115 million. This includes contingency. For the construction phase, Avantium and Worley signed an engineering, procurement and construction contract for the FDCA Flagship Plant with a contracted mechanical completion date of Q4 2023. We therefore expect that the construction is completed in 2023 and that the Flagship Plant will be operational in 2024.

The third key condition is obtaining sufficient offtake commitment, and this condition was already met. As you know, Avantium has so far secured five offtake commitments with Toyobo, Refresco, Terphane, Resilux and an undisclosed major global food and beverage brand owner. This represents over 50 percent of the total Flagship Plant capacity. We have strong traction towards further offtake contracts



with prominent brand owners and converters. Our target is to sell out the Flagship Plant prior to start-up to a mix of offtakers in support of our licencing strategy.

The fulfilment of these three conditions means that we've taken a positive investment decision, and if we receive the support from our shareholders we will execute all the documentation necessary to complete the transaction, which is called 'financial close.' This is foreseeing the first quarter of next year.

Further to Avantium Renewable Polymers, we continue to develop and commercialize several of our other breakthrough technologies in our portfolio, such as Ray Technology for the production of plantMEG. As you know, we plan to form a joint venture with Cosun Beet Company with a vision to jointly construct and operate the first commercial plant for the production of plant-based glycols using our Ray Technology.

Another example is our Catalysis business which is increasingly focused on renewable chemistries and is continuously looking for opportunities to grow its catalysis business in this field. In order to do so, Avantium must have the financial means available to it. Avantium is also required to remain sufficiently funded during the term of the debt financing, which requires this address by the proposed equity raise. Therefore, we additionally seek shareholders' approval to authorise Avantium's management raise €45 million of capital preferably by means of a fully marketed equity offering.

Reaching this milestone marks a defining moment in the evolution of Avantium. We've been working on the commercialisation of PEF since the discovery of FDCA in our labs in 2006, and bringing it to the market has been an extraordinary journey. You can find a page on our website that describes the journey from 2006 to where we are today and how we look at the future.

This journey has been challenging, complex and capital-intensive. It requires early adopters - those willing to jump into new solutions that will be the future - and enablers - those more typically 'conventional' businesses, such as banks, who are willing to take a little bit more of a short-term risk for a long-term solution. We need individuals and brands who want to take smart risks and position themselves at the forefront of change.

We're very pleased with the backing of all our partners. We see the trust all our strategic, engineering and commercial partners and a strong consortium of Dutch banks plays in our innovative technology as a strong endorsement of the high potential of our technology to produce FDCA and PEF. With the support of our stakeholders, including shareholders, our perseverance, efforts and drive are about to bear fruit. The Flagship Plant will deliver a compelling demonstration of

viability of large-scale manufacturing of PEF to consumers, customers and partners. This will pave the way to roll out PEF globally, with a potential total addressable market of \$200 billion, by selling technology licenses to industrial players around the world. The support of our shareholders at the EGM will enable Avantium to move to the next exciting stage of its development.

That concludes my statement. I am now opening the line for questions to Bart or to me. As we do not have an operator at this time of the day I hope we can do this in an orderly fashion so if you can state your name, state the question and we hope we can find the right sequence to do this. Please go ahead.

QUESTIONS AND ANSWERS

- **Wim Hoste – KBC Securities**

Good evening. My question would be on capex. You mentioned EUR 115 million including contingency. The contingency that's previously mentioned is 20 percent so on the total packaging, or total financing, a need of 180 million that would be 30 million. Am I right to conclude that full EUR 30 million which was previously mentioned is included in this capex amount or is contingency also, for example, partly to be allocated to working capital needs? Basically, the question is: do we have capex EUR 85 plus EUR 30 million contingency or is it another amount?

Bart Welten – CFO Avantium

Hi, Wim, it's Bart speaking, and good evening. Let me try to answer you. Indeed, in the past we communicated 20 percent contingency on the EUR 150 million, both capex and costs and working capital. I think now we specified that the capex is EUR 115 million. Of course, that includes still some contingency, but I think it's also fair to say that, as we moved so much further with engineering and de-risking our capex figure, the contingency is also lower at this moment; so, of course, it's not EUR 30 million anymore. But as I just mentioned, we detailed a lot of the engineering and the sourcing of that capex facility, so there's still contingency in our total amount that we invest but much less than it was a year ago.

Wim Hoste – KBC Securities

Okay, understand. A question on the financing package and conditions regarding the debt facility: if I read well, your information memorandum quotes an 8 percent interest charge. If I then compare that to the graph that is shown a little bit further on in the slide, in the information memorandum, apologies, then it mentions in the uses of funding that EUR 12 million would be attributable to interest. I know probably it has something to do with the timing of taking up the money of that

debt facility, but EUR12 million in total interest charges then 8 percent seems not to add up to EUR 12 million. Can you maybe help me to understand what's happening and what is the difference between those two numbers?

Bart Welten – CFO Avantium

Let me also answer you on this one. We, indeed, communicate that on full drawn basis of EUR 90 million, and if you take approximately 8 percent, you come to a rather large figure. The figure we have in the pie chart, of course, is over the full period and that means, indeed, as you indicate, it takes quite some time before we start drawing on this debt facility. Of course, we first start using equity of the shareholders. After that, we also use the grant income so ultimately we will start drawing on that. And, of course, we begin with engineering before we start really having large expenditures for the capex facility. So, indeed, there is a steep step up in spending and the vast majority is at the end of the building construction.

Wim Hoste – KBC Securities

Okay, understood. I leave it here for now, but congratulations on your announcement.

- **Patrick Roquas – Kepler Cheuvreux**

First of all, congrats with the securing of the funding but it seems that securing the funding took longer than expected and the terms seem pretty steep. Also, you're asking for approval for another EUR 45 million in another equity raise. So, what is really meaningful for existing shareholders to be excited. Sorry, that might sound a bit sceptical, but that's the question.

Tom van Aken – CEO Avantium

Patrick, let me respond to that. You're completely right that it took longer than we had planned and expected, but I think if you look at the complexity of the transaction with the number of parties that are involved: we have two equity investors; we have five banks that are participating; we have, of course, an engineering contractor, we have multiple offtake agreements, so there's a lot of complexity to make these things actually come to completion. And we're not shying away that this is a more complex transaction than we may have originally liked but I think in that sense it also reflects the risk profile that people who provide this type of financing see; and I think it's very challenging if you have a new company that doesn't have an existing, let's say, cash flow that is doing something completely new. That, actually, is quite challenging for banks to provide these type of loans, and I'm very proud that we've been able to succeed because I think most companies would have failed actually to get to this point.

So, we have actually gone a very long way to make sure that everyone participates, and, of course, it comes with a certain price, I totally agree. Therefore, I think it's important to highlight that we have a facility, or a loan, in place for three years. After that, we expect we've been able to sell out the plant and then come to a more reasonable and lower cost refinancing than what we're able to achieve today.

I think that is just the reality of what it is. We've looked at options around the globe, so I don't think there's anyone who can say that there's certain things we haven't looked at, and I'm extremely proud that we've been able to convince these banks but also Invest-NL to provide us €90 million of debt financing, which I think is really a remarkable achievement. So, I'm feeling actually very proud of this and that's really the way the company perceives it. I'm actually just finished the first round of discussions with our shareholders. I think people are predominantly very pleased about this result because the most important thing is that the plant is going to be build and subsequently we expect things to become easier. So, I think we've really put in everything we have to come to this point and it is therefore an incredibly important milestone for the company.

Patrick Roquas – Kepler Cheuvreux

I can see that. Okay, thanks Tom.

- **Reginald Watson – ING**

I'd just like to clarify a little bit following on Wim's question about the capex. You have capex at EUR 115 but your information memorandum mentioned EUR 192 million in funding, so does that mean, versus the original expectation of EUR 180 million which included the 20 percent contingency, so the 100 million original expectation is only using 15 percent of contingency, so, I'm guessing then start-up costs and working capital, etc., have increased by more than 90 percent? Is that a fair assumption and if so, why?

Bart Welten – CFO Avantium

Let me also try to answer you on this question. The non-capex costs in this EUR 192 million are start-up costs and working capital of the renewable polymer business, as of 2019, '20, '21 and '22 until the Flagship Plant becomes cash breakeven. So this is quite a period. We've also indicated we have an increase in funding needs because we have a delay of one year. I think you might recall our original plan was to take FID a year ago exactly, so we've been funding that as well. And, of course, the operating cost of getting products qualified and the engineering done, those kinds of things are also substantial. So, indeed, most of

the 'increase' – if you can call it like that - we have a delay of our operating expenditures, and that was mostly the increase from EUR 180 million to EUR 192 million.

Reginald Watson – ING

Thanks, then a follow-up question on the funding structure. This issue of warrants, they appear to be sort of equivalent to a 5 percent per annum cost, if you like, the way you've explained them in the info memorandum, so let's say the actual cost of this financing is amounting to 13 percent per annum. That's point one. Then question two is: why has it been structured in this way to provide an equity-like instrument, because ultimately you will dilute existing shareholders?

Bart Welten – CFO Avantium

Let me also try to comment on your questions in this case. Indeed, we have indicated how we came together with the banks to this 2.84 million of warrants, and they basically started with an expected yield that the banks wanted to make year on year on year over the three years on their loan amount - except ASN bank who cannot accept warrants - so that's the 75 million times 15 percent. And that has been changed into the formula of our average share price of the last few months, put into a number of warrants that we issue. I think for us, first importantly I like really to stress that the warrants only become exercisable when we have a commercial operating date, so we've been very strict in restricting the exercise to really having a shared success and, therefore, we call it also, as Tom did in his introduction, 'a success fee.' That's what I really like to highlight. Indeed, you can add the yield of the warrants, the 5 percent, to the interest. 8 and 5 are 13, so I fully take you on that. I still also like to say that the 8 percent interest is what we pay, but as I also indicated earlier to Wim, it takes quite some time before we have full draw on this facility. And as I said, the 5 percent is really a success fee only when we are together successful, then it becomes 2.8 million of shares and that gives, indeed, a certain dilution based on our existing number of shares 51.2 million. That's a little more than 9 percent.

Reg Watson - ING

Okay, understood. I was going to ask about, and please explain, but because they can't take warrants they're getting a higher interest fee? Somehow they compensated for their lack of warrants in other ways?

Bart Welten – CFO Avantium

Basically the answer is no, but I cannot go into much detail on that one.

- **Fernand de Boer – Degroof Petercam**

Congratulations. We almost lost faith, so I'm very happy that you finally took the decision. Coming back on the warrants, if I understand correctly, the conditions are going to be adjusted if you do the 45 million capital increase, or not?

Bart Welten – CFO Avantium

Yes, Fernand, I can also confirm that, so there's an anti-dilution agreed with the banks so if we get approval to do our 45 million equity raise then the banks also on that issue, the EUR 45 million, want to have anti-dilution. That's the similar 9 percent over that amount that we'll then raise.

Fernand de Boer – Degroof Petercam

Okay, and the debt financing, is that done on the holding level or is it done at subsidiary level?

Bart Welten – CFO Avantium

Let me try to give a little colour on that. The majority of the debt will be on Renewable Polymers level and, therefore, a minority on holding level.

Fernand de Boer – Degroof Petercam

Yeah, but let's say the breakdown of the 22 percent ... what was it, 77 percent, that's not going to be changed in the future? That stays like it is today?

Tom van Aken – CEO Avantium

First, the stakes of minority shareholders Groningen Consortium and Worley is about 22 percent in Renewable Polymers, this isn't going to change as a result of the debt financing. So, the warrants are on group level on Avantium NV, and there are no warrants or any other things on Avantium Renewable Polymers level.

- **Priyanka Patel – Berenberg**

Priya here from Berenberg. Firstly, congratulations on the funding. I've got two questions. Firstly, now you've got this funding what do you think the next big hurdles are in the commercialisation of PEF? How confident are you in the scale up and the technology, for example? Then secondly, you communicated in the half-year results that you expect €20 million of cash. Has this changed, like, will this be affected by the new COVID variant because you're catalysis business was affected by COVID last year?

Tom van Aken – CEO Avantium

Priya, thank you for your questions. Let me take the first one. I think first of all this is really the big milestone because this will enable us to initiate the EPC Project, to build the FDCA plant in Delfzijl. I think the major part for us, of course, on the commercial side is to sell out the remaining parts. Our goal is to have a fully sold out plant before start-up, so that means we have another [two] years to sell out the remaining, let's say, 50 percent, and we are confident about this because we have a very strong pipeline of many opportunities of customers that are interested in using PEF: in bottle applications, in film applications, but also in other applications, so I think we have, in that sense, a good position to fill the plant with a very interesting mix of applications.

That brings me to the second point, which I think the next major milestone will be to move this to the licencing phase because ultimately the business model that we have, as you know, is to sell licenses, and we know the building of this plant, therefore, is a critical milestone because before we will be able to sell licences we have to demonstrate that the technology works on large-scale. I think this is the most important objective of this plant is to demonstrate that the technology works and to convert that into the sale of licences because that will really be, let's say, the monetisation for the company on commercialising this technology. Let me hand over to Bart for the second question.

Bart Welten – CFO Avantium

Good evening Priya. Your second question was on our cash rate of 2021, below 20 million. Of course, we haven't closed the books yet but we're still aligned with the earlier comment we made.

- **Wim Hoste – KBC Securities**

A couple of other questions. What happens if for one reason or another there's some delay in the construction of the plants, and in the meantime you're burning cash and you would fall below the equity requirement of the debt facility? Maybe you can elaborate on what this minimum equity amount is or how the mechanics of the deal with the banks are in case you drop below that limit?

Bart Welten – CFO Avantium

I think your question has two items. First of all, what happens within RP if the capex will become more. I think that was your first question. I think we indicated that, of course, we still have a sound level of contingency in our funding package. I'd like to start with that, and on top you might know by securing the contract with Worley, for equity sake we also have a very strong risk-sharing mechanism that in case of overspend they will pay 50 percent. More importantly, as they're so

experienced in building factories they will prevent that we ever together get into overspend. So, we piggyback on their vast experience and professionalism.

I think your second question was on an equity level that, of course, we as a group need to have. I'd like to say on that the following: Avantium always needs to have a certain level of cash on prudence and our own responsibility for a going concern and making sure we have some smooth operations, and everything that we've agreed now is in line with our own level of cash that we need.

Wim Hoste – KBC Securities

Okay, understood. Then you have more than 50 percent off take agreements for the plant. You're in discussion with multiple other interested parties, so based on contracts you already have can you explain a little bit the economics of the plant in the sense what is realistic revenue per ton coming out of this plant? Also, we now have the capex amount, what kind of depreciation speed should we put on that capex amount? In how many years would you depreciate such? If you can elaborate on those two items, that would also be helpful.

Bart Welten – CFO Avantium

I think your first question was on top line. I think we have been communicating that we expect to get €8 to €10 per kilo. We are building a 5 kiloton factory so that will drive our top line on PEF and FDCA to, what is it, €40 - €50 million. And we are still on track as we indicated with all our off take agreements so far that we've signed. We are fully in that ballpark and we expect, of course, with the next batch of offtakes also to make that ballpark.

Your second question was on depreciation rate. Of course, that has to follow economic life expectancy of this asset and so far we're working with an estimate of 10 years so we will depreciate it in 10 years. Of course, it has a non cash impact, but that is our current understanding. The reason behind that is, I think, a positive one. Not that the asset itself, but we very much expect that we get into a licencing structure and that will, as you know, bring in the real cash flow and the real money flows to the company.

Wim Hoste – KBC Securities

Okay, understood. If you get to €8 to €10 per kilogram, what kind of heavy down margin do you think you can make on that kind of revenue per kilogram?

Bart Welten – CFO Avantium

We have been communicating in the past that we expect to be in lower mid 20s of EBIDA percentages on that turnover. More importantly, the real message we want

to give you is that our flagship will be cash positive, so after interest and all other kinds of costs, some more capex is also needed for such a large factory year on year. It still will be cash-generating, I think that's important. Again, we like to stress that in itself the flagship is not our money machine; that will be the licencing income.

Wim Hoste – KBC Securities

Okay, understood. The last question for me, licences, there's an information memorandum, something mentioned that industrial unit should be at least 100.000 tons. Is that the kind of assumption you're making, that you will sell licences for 100.000 tons of units, and can you effectively compete against very large PET units of over 500.000 tons if that's the kind of fruit this technology will take? Any thoughts on that?

Tom van Aken – CEO Avantium

Wim, I think in the past we've communicated we see three phases in the scale up and in the commercialisation of FDCA and PEF. We're now coming to Phase 1, and we're coming in the price bracket that Bart just alluded to. The next phase is plants that are going to be in the, let's say, 50 to 200.000 tons or 100 kiloton scale. The price levels we expect are going to be between €4 and €5 per kilo. That's going to be cost effective if you compare that with alumina cans and glass bottles. Also in films, I think in all film applications we will be cost effective, of course, competitive at that stage. Then we expect in the third phase when people are going to be building plants of, let's say, 300.000 tons, you really come to the commodity pricing and can compete with PET.

I think I've explained in the past that because we have significantly improved barrier properties over PET, we don't think we would ever really have to compete on the price of PET because we expect people to pay always a performance premium for the fact that our barrier properties are 5 to 10 times bigger, which will allow you to make lighter weight packaging in comparison to PET. The confirmation we've received from brand owners is that premium is valued at approximately 30 to 50 percent, so I think in that sense there is a lot of value in here.

Of course, I haven't spoken yet about the value in terms of what is referred to as 'green premium,' the fact we do not use fossil resources but we use renewable resources. Of course, carbon pricing is going to play a very important role. The second thing is recycling. We expect PEF-based packaging is going to be a much better recycle compared to fossil-based plastics, and more and more of the mandates and regulations are put in place are actually going to be making it very

difficult for these, let's say, 'one-way' plastics and 'one-way' packaging solutions that they're probably going to be phased out. So, in that sense we look at the future in a very positive way and we see lots of ways to create value for PEF.

Wim Hoste – KBC Securities

Okay, understood. Thank you. Those were my questions.

Leopoldo Palazzi Trivelli – ABN AMRO / ODDO

Leopoldo here from ABN AMRO. My first question is regarding the licences basically. How should we look at this? Of course, licencing would be the key revenue generator moving forward but when should we expect this type of announcement? Can they occur as basically their Flagship, as stated, are going to be built or will we need to expect for the Flagship, let's say, to be fully built and operational before that licence is announced?

Tom van Aken – CEO Avantium

Leopoldo, good evening and pleased to have you join the call. We do expect licences will want to see the flagship plant running, so we do expect 2024 will be the first year when we can make such an announcement. Of course, we are in discussions with companies and partners about this so it could, of course, be that someone is willing to be ahead of the curve - but that would actually be a plus. Our own assumptions are the first time we would be able to sell such a licence is going to be when the plant is really operational and people see that the data we have about the process are going to be also valid on a commercial scale.

Leopoldo Palazzi Trivelli – ABN AMRO / ODDO

Great, thanks for replying, it makes a lot of sense. My second question regards basically the FDCA and PEF. You mentioned you will commercialise both. How should I look into that? Will it be predominantly PEF or will it be FDCA? How to basically look into that one?

Tom van Aken – CEO Avantium

I'm happy you asked the question. For FDCA it's going to be somewhat different than for PEF because for FDCA we foresee people will build new plants. Maybe they can retro-fit some existing infrastructures but it's going to be predominantly new FDCA plants that will have to be constructed where people will require access not only the IP but also to the technology, so we help them to design and engineer these types of plants; and we expect that we will be getting licence fees to, let's say, get, about 25 percent of the net present value of such an FDCA plant. So, it's going to be dependent on the scale, it's going to be, of course, dependent on a

number of factors where this is going to be built but we do expect significant parts of value will be paid to us as part of the licencing packages.

Then if you look at the polymerisation, the polymerisation we also have the IP to polymerise FDCA to PEF. That's technology where we do not expect people have to build new assets because there's sufficient polymerisation capacity out there, so in that sense the PET, polyester producers, will be able to use their existing assets to produce PEF but they will have to pay us a certain licence fee for, let's say, accessing the IP and the technology required to do it, and that will come in probably as a separate fee in comparison to the FDCA licences. Of course, there may be companies that will want to do both, which is fine. We can, of course, combine it in a package deal but I think EFC in the PET value chain this has gone through certain phases where everyone was doing backward integration and afterwards they were actually divesting that. So it's very difficult to foresee how that will go. But, in principle, we're fine with both ways but we do foresee there are going to be separate assets for FDCA and separate existing assets for making the polymer.

Leopoldo Palazzi Trivelli – ABN AMRO / ODDO

Great, thank you, it's very clear. Again congratulations, of course, on the announcement.

Reginald Watson – ING

Tom, just the so far unidentified global brand owner who has committed to some of the off take of the plant. When do you think we will find out who that global brand owner is?

Tom van Aken – CEO Avantium

Yeah, it's a good question, Reg. We know they actually want to do. They're responsible clearly for marketing announcements communications themselves, but we do expect that it will come before the launch, but the timing thereof is something which we expect is going to be closer to the plant actually coming on-stream, so closer to, let's say, 2024 rather than early next year.

Reginald Watson – ING

Okay, it's helpful, thank you. At least we know we've got a good few years left to keep bugging you about it.

Tom van Aken – CEO Avantium



There's one question actually from Patrick that I want to come back to, which is: why should investors be excited about this? I actually wanted to keep that questions for last, Patrick.

Why I think this is such an important moment, we've been talking to large numbers of investors over the past years, and many times I've heard people think this is extremely interesting and very, very promising but they just said we were too early, that this was too early for them to invest, and with this milestone we're moving from, let's say, a research and technology stage to a commercial stage, and I think that's going to very important for many of the investors that are looking at this who will see that this is not going to be an R&D concept but this is going to be an actual business and an actual plant that's going to be operational. The second point is many of the investors for this are looking at our FDCA and PEF technology as: this is the first technology that you have in the pipeline but you have many other technologies in the pipe that you basically want to take the same steps to bring those to market, but we all know you have to first bring the first one through the door in order to show that, as a company, we have the capability to do it. And that's something I really want to emphasise, that I think this is a remarkable achievement for the company. Many of our US competitors, who've had very promising technologies, were never able to commercialise it and never to demonstrate it on scale, so I think this is something that is remarkable.

The last point, and that's more directed to brand owners and companies that are using PEF. PEF has been talked about for years, for more than a decade, and it's been always seen as the next-generation plastic, but no-one was ever able to make it on a commercial scale, and I think the sustainability profile in combination with the performance characteristics, I've not seen any polymer in this over the past 15 years; I have not seen anything in the pipeline that is coming close to it, so I think in that sense it's very exciting news for brand owners and for retailers and for people that using polyester packaging, polyester fibres, because a new polymer is on the way and it really has basically all the features of what the new economy needs: it's fully plant-based, fully recyclable, degradable, and it has superior properties, so I think in that sense it should be a really important message for everyone who is interested in this type of innovation.

With that I want to actually conclude the call. Thank you all for staying up and listening to this. I hope you share our excitement. Of course, we're available for any other questions you may have. Please feel free to reach out to us and we'll be happy to provide more information wherever it's needed. Thank you everyone.

End of call
