

Subject	Questions shareholders Avantium AGM 2021
Date	19-May-2021

Questions asked prior to the Annual General Meeting

No	Question	Answer
1	What is the rationale behind Avantium acquiring the right to use Eastman's FDCA-related patent portfolio? Does this impact the efficiency of the FDCA production process or can more geographies be unlocked, e.g. US or Japan?	<p>Avantium has protected its technology to produce FDCA, as well as the polymerisation of FDCA into PEF, and in many applications of PEF, such as bottles, fibers and films. Avantium also has patents on (chemical) recycling of PEF. We have a solid protection of our leading technology with 57 patent families representing more than 400 patent rights and covering the full PEF value chain.</p> <p>For innovations such as FDCA, it is necessary to keep protecting the patent portfolio. This is not only required to safeguard Avantium's leading position of the production of FDCA and PEF, but also required for the technology to be licensed out. Avantium continues to actively file new patent applications on the YXY[®] Technology to produce FDCA and PEF, in order to protect inventions that contribute to our leading technology position and to our licensing strategy. We are also continuously active in opposition discussions. As you can read on page 24 of our Annual Report, in 2020, Avantium took steps to improve, secure and defend our IP portfolio. We successfully defended our patents against third-party observations and oppositions in both Europe and Japan.</p>



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		<p>We are always looking to improve our process to produce FDCA and PEF, both from a commercial and a technological point of view. The Eastman patent portfolio license allows us to pursue those attractive opportunities, both for ourselves and for futures licensees. We look forward to growing our partnership with Eastman in the coming years.</p>
2.	<p>In the Trends magazine article of 29 April, you stated: "If a party wants to make this PEF product very big and is better able to do so than Avantium, then I would be open for a take-over." Have there been parties who have approached Avantium in this respect during the past two years?</p>	<p>As a matter of corporate policy, we never comment on possible discussions or negotiations with other parties. What we can say is that we have been very focused on executing our strategic objectives over the past years. Partnering is at the heart of Avantium's strategy. We are always exploring partnerships across the entire value chain of our technologies.</p>
3.	<p>In the Food navigator article of 16 April, you stated: "From 2026 onwards, we expect the next stage will be to build larger-scale plants in Asia and the US." Can you please elaborate on the interest for licenses from industrial parties and are you already in discussions with one or more parties?</p>	<p>The interest for FDCA and PEF remains high. We know from discussions with partners, customers and consumers that there is keen demand for sustainable alternatives for the materials we use in everyday life.</p> <p>Avantium is in regular discussions with parties to talk about licenses for larger-scale plants. The unknown element remains the speed of market adoption. We believe that the FDCA flagship plant will provide us with key information about this market adoption rate.</p>
4.	<p>What is the reason why you cannot give the ownership percentage of Avantium in the JV with the Cosun Beet Company? Will Avantium get a minority or majority ownership?</p>	<p>We cannot disclose this yet as we are still in discussion regarding the shareholder agreement with the Cosun Beet Company. We aim to establish the joint venture in 2021 and we foresee that Cosun Beet Company will become</p>

		the substantial shareholder; Avantium is foreseen to be a minority shareholder in the joint venture.
5.	What will be the financing structure for the Cosun Beet JV and on what will this depend?	Before the parties can decide on the optimal financing structure, they need to have a solid estimate of how much capital is required. The capital estimate required for a full size commercial plant-based glycols plant will be dependent on the engineering study that the joint venture is intending to complete in 2023, as an important element for the Final Investment Decision in 2023.
6.	Is there a possibility that next to Avantium and the Cosun Beet Company another industrial partner joins the JV?	Cosun Beet Company will bring feedstock and operational expertise into the JV, in addition to access to capital. Avantium's role is to provide a license to the technology together with making available its expertise in deployment of the technology, and as minority shareholder we will also invest capital. There is keen interest in both the product and the plant-based technology. We will jointly explore opportunities for the addition of a strategic partner in the upcoming months, provided such a party would bring additional expertise, capital or other elements to make the JV successful.
7.	In Europe and North America, more and more pilot/commercial scale bio refineries are being built that focus on the production of lignin, sugars and intermediates. What gives you the confidence that you can still move to the commercialisation phase of the Dawn technology? And what are the key drivers for Avantium to move to the commercialisation phase of the Dawn technology?	We have made the strategic decision in the portfolio to first focus on the commercialisation of FDCA, plantMEG and PEF, and we have communicated important progress on milestones towards commercialization and scale-up of our two most advanced technologies. Once the commercialisation of FDCA and plantMEG are sufficiently progressed, we will evaluate next steps for our other technologies. We strongly believe that our technology to produce industrial

		<p>sugars from forestry and agricultural residues holds a large potential. We see industrial sugars from the Dawn Technology™ as an imperative of a successful future bioeconomy. When the chemical industry begins to shift to plant-based sourcing, non-food sources of carbon will be required for the world’s product needs.</p>
<p>8.</p>	<p>Have you considered raising capital via a rights issue? If yes, why have you not chosen this structure?</p>	<ul style="list-style-type: none"> • At last year’s AGM, Avantium’s shareholders granted the Management Board the authority to issue 20% new shares and to exclude pre-emptive rights. • One important objective of the recent capital raise was to ensure that the highest possible amount of capital (net of expenses) was raised, which will be beneficial for all Avantium shareholders. • After careful consideration of all relevant alternatives, Avantium deemed the “accelerated bookbuilding structure (or ABB) as the most optimal and flexible method to maximize proceeds, taking the following factors into account: <ul style="list-style-type: none"> • Minimizing market exposure: The ABB transaction was completed in less than 3 hours on 14 April, therefore it is clear that the ABB structure minimized market exposure and execution risk versus a rights issue, which has an execution period of circa one week. • Minimizing company costs: The total company costs of a rights issue, including prospectus and all

		<p>related advisers' fees, could be as high as several times the ABB costs for Avantium. Avantium therefore used an exemption under the Prospectus Directive to issue new shares without a prospectus to avoid incurring significant additional costs.</p> <ul style="list-style-type: none"> • Following best practice: The ABB structure Avantium used followed best practice in the European capital markets, where in recent years nearly all capital raises by European companies of less than 20% of shares outstanding have been executed in the form of an institutional ABB, not a rights issue.
<p>9.</p>	<p>PwC is your accountant since 2004. The legal term for an accountant is ten years. Why do you propose to re-appoint PwC?</p>	<p>Avantium is a listed company since 2017 and this legal term applies to listed companies. It is apparent that PwC is capable of forming an independent judgement concerning all matters that fall within the scope of its auditing task; they have a thorough understanding of the risks and opportunities of a technology development company and strong accounting expertise.</p> <p>A maximum period of five years applies for key audit partners responsible for carrying out a statutory audit of a publicly listed entity. To ensure full compliance, PwC changed the audit partner in 2019. Mr Antoine Westerman succeeded Mr Joris van Meijel.</p> <p>On this basis, the Supervisory Board, upon recommendation of its Audit</p>

		<p>Committee, proposes to reappoint PricewaterhouseCoopers Accountants N.V. as the external auditor of Avantium for the financial year 2021.</p>
<p>10.</p>	<p>The short-term annual variable remuneration in cash (Bonus) and the long-term annual variable remuneration in the form of shares (LTIP) for 2020 are forfeited for the Management Board. In other words, the Management Board did not receive any bonus over 2020? Can you please provide more insight on what percentage of the targets has been achieved?</p>	<p>The year 2020 has been an exceptional year. On the one hand, 2020 was a year of progress for Avantium. The three business units all made strong progress in line with our overall strategy.</p> <p>The effects of the Corona pandemic, however, meant that not all targets were met. One such target was to take a positive FID on the construction of the FDCA flagship plant and formalise approval for the project by the end of 2020. The COVID-19 pandemic affected negotiations with financial, commercial and other strategic partners, with these discussions taking longer than previously foreseen. This meant that the overall average achievement of the Management Board members for performance year 2020 amounted to approximately 35% of the maximum achievable bonus.</p> <p>The Management Team decided differently however. In light of the aforementioned delays in delivering some of the business plans, as well as the impact of COVID-19, the Management Board and management team decided to forfeit their annual cash bonus for 2020. This also results in the forfeiture of the non-cash bonus component. The Supervisory Board agreed with this decision and appreciated this response of</p>

		management to the challenging circumstances.
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Questions asked at the Annual General Meeting via the chat box

11.	What does Paboco mean for Avantium? Does the membership cost money,? Is there contact between the companies? Is there progress for Avantium? And are there other biobased options that are competitive?	The paper bottle project is important to Avantium. Avantium is working together with the other partners of Paboco, and in particular with Carlsberg on developing paper bottles or green fibre bottles for application of beer packaging. Paboco is a partnership, it is not a membership and does not require any financial obligations for the Avantium. We are in very regular contact with the partners of the Paboco initiative. It is also important to highlight that partners of Paboco use both recycled-PET as well as PEF. PEF clearly has a sustainability advantage as well as a very strong advantage in terms of higher barrier properties. This is particularly important for applications such as beer. PEF does not impact the taste of the beverages.
12.	Coca-Cola Europe is conducting a trial in Hungary as part of Paboco and the customer acceptance research is done. Will Avantium get to see these results?	Avantium cannot comment on behalf of Coca-Cola on the trials that Coca-Cola is executing in Hungary with regard to the paper bottle. That is something you have to ask Coca-Cola. I can only comment on the collaboration we have with Carlsberg where we are doing also a test with customers and plan to do further tests in the year 2021 using paper bottles including PEF.
13.	Is there any contact collaboration with LEGO?	LEGO is one of our partners in the PEference consortium. That means that we are working on application development for PEF in the area of LEGO and that is an ongoing collaboration. We cannot provide

		further details on any specifics regarding this collaboration other than that it is an ongoing collaboration.
14.	Can you tell us more about the Cosun Beet Company collaboration? When would you aim to have the term sheet ready and what is the financial contribution that Avantium foresees in the joint venture?	<p>The term sheet to establish a joint venture with the Cosun Beet Company has already been signed. We expect the establishment, so the legal formation of that joint venture in 2021 and the final investment decision in 2023.</p> <p>Before the parties can decide on the optimal financing structure, they need to have a solid estimate of how much capital is required. The capital estimate required for a full size commercial plant-based glycols plant will be dependent on the engineering study that the joint venture is intending to complete in 2023, as an important element for the Final Investment Decision in 2023.</p>
14.	Can you please elaborate on the share price movement?	It is the company's policy not to comment on share price movements. The company is committed to constant and regular communication with the shareholders, which it has been doing very actively and will continue to do.
15.	How do you evaluate the situation that competitors in China are already producing PEF and what are the differences to the PEF that Avantium is producing?	We are closely monitoring all materials that are being produced by other companies in this space. We are aware that other companies are working on FDCA and PEF, but we strongly believe in the quality of the FDCA and PEF that our company produces. We will of course closely monitor this for the future, but we currently do not consider this as a real competitive threat.
16.	If PEF enters nature and degrades could microplastics	PEF is a polymer that degrades, it is consumed by organisms: by bacteria and by fungi. In other words, PEF does

	<p>enter nature or leak toxins into the earth?</p>	<p>not accumulate in the environment and does not break down in smaller particles or microplastics that float around in the ocean for hundreds of years. It therefore also does not leave toxins into the earth.</p>
<p>17.</p>	<p>Could PEF be used as a spray or coating for paper bottles in the future.</p>	<p>Usually, a barrier is very important in bottling applications and we have seen so far that if you spray PEF, it actually does not give you the same barrier properties compared to injection stretch blow moulding.</p>