

Subject	Questions shareholders Avantium AGM 2020
Date	14-May-2020

Questions by Mr Ficken

No	Question	Answer
1	Which possibilities has Avantium to raise more cash until the moment that Avantium is cash flow positive?	<p>We aim for an operational cash outflow of less than EUR 25 million for the year 2020. The focus of the company in 2020 will be on securing financing to accelerate towards commercialisation of our lead programmes.</p> <p>For the coming year, we will focus on attracting the funding for the FDCA flagship plant in Delfzijl, which we are working towards having in place before the end of the year 2020. We furthermore plan to obtain off-take commitments from our partners. Our Renewable Chemistries business will concentrate on exploring partnership opportunities for our three lead programmes Ray, Dawn and Volta. In Catalysis we aim for profitable growth by, amongst other things, broadening our portfolio with new products and services.</p> <p>We expect that it will take us into 2023 before the FDCA Flagship is cash contributing.</p> <p>In order to bridge the moment till cash generation, we need to secure sufficient cash for the company to operate. We are investigating all financing options and raising equity is part of that.</p>

		<p>On the agenda today under agenda item 9b is a desired authorisation to issue shares. Especially in the current circumstances with the Corona pandemic, we believe it is desirable for the Management Board to have the authority to issue ordinary shares with a nominal value amounting to 20% of the issued capital at the time of issue. This will allow us to be flexible and to react quickly to circumstances.</p> <p>Avantium wishes to make use of the authority sought under this proposal for the purpose of providing financial flexibility in our drive towards commercialisation of Avantium’s lead programmes.</p>
<p>2.</p>	<p>- Can you shed more light on your discussions with strategic partners for the FDCA Flagship Plant?</p> <p>- Will strategic partners also become owners of the IP or will the IP remain 100% owned by Avantium?</p>	<p>We aim to secure strategic partnerships for building the value chain for FDCA and PEF from raw material to end product and the recycling of PEF polymer, as well as securing the financing of the flagship plant. As explained in June 2019, we are looking to secure ~35mio EURO of strategic equity partners. We aim to do this at the level of Avantium Renewable Polymers BV, which is currently a 100% subsidiary of Avantium. Potential partnerships include feedstock providers, license partners, polymerization partners, convertors and consumers brands. The market interest for PEF remains very high, as this product represents a unique combination of sustainability profile, circularity options and performance attributes. We are working hard to attract partners, but we cannot disclose any specifics at this moment in time,</p>

		this includes any specifics on access to IP or any other rights that may be part of such partnership.
3.	Can the low sugar price boost the RAY business case?	Avantium uses plant-based renewable sugars as feedstock. In our demonstration plant we will test sugars from different crops and in different grades to assess their economic viability.

Questions by Mr Vos

No	Question	Answer
4.	What is the status of the Parana project?	Avantium is looking at new plant-based building block opportunities by evaluating polymer products for the plastic materials of the future. This is known under the project name Parana and is part of the company's early-stage portfolio. This project is very much alive, but in early stage.
5.	Why is the average exercise price of options for managers and employees with 2.48 (JV 2019) far below the price for which shares have ever been issued (not only for IPO), which is approximately 10-11 euros? Is that a balanced relationship between shareholders and management/employees?	Options are a way to align the interests of employees with those of the shareholders, and form part of our long-term incentive plan. On an annual basis, share options may be conditionally awarded to certain managers. Any annual grants are based on exercise prices aligned with share prices of the concerned year and currently lower than the IPO share price, at which price many of the concerned employees also received share options. The Options will vest on an annual pro rata basis during a period of three (3) years as of the date of award, therefore fully vesting on the third anniversary following the date of the award. The exercise period of the

		<p>Options will be up to five (5) years after the date of vesting.</p> <p>Options serve as a way to focus and incentivize management and key employees on delivering on our strategic objectives, reaching our goals and thus aligning their interests with those of the shareholders.</p> <p>Reference is also made to the proposed Remuneration Policy which explains the principles of the Avantium Employee Stock Option Plan (ESOP).</p>
6.	How do the employee options work, are they cash-settled or are additional shares issued?	In the context of an exercise of share options, additional shares are issued. Reference is made to the proposed Remuneration Policy which explains the principles of the Avantium Employee Stock Option Plan (ESOP).
7.	Can you tell us more about the sale of the patents of bioaromatics to TNO, for cash or with closed stock exchanges?	This was a cash deal. We have agreed with TNO not to disclose the specific amount (not material for Avantium).
8.	If there is a great deal of interest in the PEF flagship plant, could this be scaled up to 10,000 tonnes before the investment decision is being made? Or is that technically impossible?	No, the design and engineering is based on 5kta plant and we can't change that unless we redo the engineering, which will cost valuable time. Our focus is scaling up to 5kta. Scaling up the process is not restricted by the chemistry itself, so after the 5 kta we can go to large scale, the exact scale is to be discussed and will be driven by market demand.
9.	Tax losses at the end of 2019 amount to 152 million, at a rate of 20% this is worth approximately 30 million, why is	We have decided not to capitalize these balances on our balance sheet to be cautious and not aggressively overstate the balance sheet, as there may be a

	this not (yet) capitalised on the balance sheet?	risk that we might not be able to recover all tax losses, as these expire after a certain period of time.
10.	Henkel company is replacing Basf in Peference, what is the partnership with Avantium?	We work together with Henkel in the PEFerence consortium. The PEFerence partners aim to replace a significant share of fossil-based polyesters with the 100% plant-based PEF.
11.	In December 2019, a sneak preview of a new "tool" was announced for the Catalysis department, why are we no longer hearing about this?	The product is ready to be launched in the market. Launching a new product is a bit of a challenge in these Corona-times, so we wait with the official launch until laboratories are open again.
12.	What are in your view the threats or opportunities of the Corona-crisis for the biobased plastics industry?	The need to stay consciously focused to build the bio-based plastics industry while fighting the pandemic is paramount. There is pressure on governments to lighten restrictions on single-use plastics and other materials; this would delay the urgent shift from linear and oil-based plastics towards sustainable alternatives. In our view this transition remains relevant to address CO2 emissions and to address the problems caused by plastic waste in our natural systems. Today, we can use plants to make fully recyclable plastics for films, bottles and textiles which are superior to oil-based alternatives. I want to emphasize that consumers are increasingly demanding that brands use more sustainable materials in their products that can be recycled and that do not accumulate in nature in the undesired circumstances that plastic products end up in the environment.

<p>13.</p>	<p>Do you believe it can be an opportunity for plastic producers in particular to have higher margins with renewable plastics than with "fossil plastics"?</p>	<p>Yes, let me bring up three drivers for the strong interest from the polymer producers in the production of PEF: 1. They can use existing polyester assets (e.g. to make PET) to produce PEF, 2. They see the trends in the market, where consumers are putting pressure on brands and retailers to use more sustainable and recyclable plastics. 3. They are looking to shift away from highly commoditized polymers (like polyolefins and PET) to more innovative and higher value products like PEF, that are at the beginning of the growth curve.</p> <p>The growth curve is on the one hand the learning curve and scale-up curve which is expected to result in significant reduction of production costs of PEF (very similar to how other polymer production technologies have been optimized and have benefited from economies of scale) and on the other hand the growth of the use of PEF and penetration in major end markets, such as packaging and textiles.</p>
<p>14.</p>	<p>What is the reason that Managing Director Marcel Lubben and Operational director Victor Vreeken left Avantium Renewable Polymers and how do you deal with this?</p>	<p>Marcel Lubben joined Avantium at the start of 2019 to lead the new Renewable Polymers business unit. Unfortunately, Marcel decided to leave the Company last Spring due to personal reasons; this is related to having to travel for more than two hours to Amsterdam, while living in the south of the Netherlands. I temporarily took over his responsibilities for our Renewable Polymers business, and we are looking at full-time replacement.</p>



		<p>Operational director Victor Vreeken also made this personal decision after careful consideration, he felt that it was time for a new challenge. We have recruited a suitable replacement for Victor to take on the responsibilities for Technology and Development, who will join us in the near future.</p>
15.	<p>Invest-NL has started this year, they are explicitly looking for "innovative scale-ups" in SMEs for the biobased economy, have you already spoken to them?</p>	<p>We never comment on possible discussions with partners, government agencies or other organisations such as Invest-NL. What we can say is that we very much welcome this initiative and that we are well aware of the opportunities for Avantium.</p>