

Avantium Announces 2021 Results:

Significant business progress with green light to construct the world's first FDCA Flagship Plant

AMSTERDAM, 23 March 2022, 07:00 hrs CEST - Avantium N.V. (Euronext Amsterdam and Brussels: AVTX), a leading technology company in renewable chemistry, today reports its 2021 full-year results.

Key Business Progress in 2021:

- Avantium Renewable Polymers announced a positive Final Investment Decision (FID) for the construction of the FDCA (furandicarboxylic acid) Flagship Plant, which was confirmed by shareholders at an Extraordinary General Meeting (EGM) on 25 January 2022:
 - Financial Close is expected by April 2022;
- Avantium Renewable Chemistries recorded a number of promising developments in 2021, including: a signed partnership with the Cosun Beet Company for Ray Technology™; the construction of a bio-asphalt test road using lignin from Dawn Technology™ and; the successful pre-pilot testing of Volta Technology at partners' sites in Europe;
- Despite ongoing travel restrictions and customers' site closures caused by the COVID-19 pandemic, Avantium Catalysis saw the start of a recovery in its Systems business (revenues: €6.8 million); the Services business was at the same revenue level as in 2020 (revenues: €3.2 million).

Key Financial Developments in 2021:

- Total revenues increased by 11% to €10.9 million (FY 2020: €9.9 million), while income from government grants decreased by 20% to €6.7 million (FY 2020: €8.4 million), mainly due to income milestones from two major grant programmes in the Renewable Chemistries business segment being fully recognised in 2020;
- Net operating expenses were €33.7 million in 2021 (FY 2020: €33.2 million);
- Cash at 31 December 2021 was €34.9 million (31 December 2020: €26.6 million):
 - The increase in the cash position was due to the successful capital raise in April 2021, raising €27.8 million (gross proceeds) through an accelerated bookbuild;
 - Net cash outflow (excluding the capital raise) in 2021 was €18.1 million (2020: €18.8 million);
- The loss for the period was €24.4 million (FY 2020: €22.8 million).

Tom van Aken, Chief Executive Officer of Avantium, comments: "2021 was a landmark year for Avantium, with the positive Final Investment Decision (FID) for the construction of our FDCA Flagship Plant announced in December 2021. This means that we will be able to start introducing our plant-based, recyclable and high-performance polymer PEF (polyethylene furanoate) to the market and start exploiting its massive market potential, as well as allowing us to sell technology licences to industrial collaborators. We have made great commercial progress across our businesses, and have expanded our partnerships, demonstrating the validity and value of our technologies. While global circumstances continue to pose uncertainties, we look to the future with optimism as we continue to advance and commercialise our sustainable technologies."

Business Overview

Avantium Renewable Polymers

Throughout 2021, we worked hard to reach a positive Final Investment Decision (FID) for the construction of a 5-kilotonnes FDCA Flagship Plant, to be built in Delfzijl, the Netherlands. Avantium had identified three key conditions required for a positive FID: (i) securing sufficient financing, (ii) obtaining sufficient offtake commitments for the Flagship Plant, and (iii) finalising the engineering and establishing the supply chain. In early December 2021, Avantium secured a €90 million debt financing package from a consortium of Dutch

banks (€15 million each) and the Dutch government-backed impact investment fund Invest-NL (€30 million), thereby meeting the final outstanding financing condition.

By the end of 2021, we had secured a total of €192.5 million, subject to Financial Close, to support the construction of an FDCA Flagship Plant. This funding came from a number of sources: (i) grants: a €20 million “PEference” Horizon 2020 grant¹ and a €7.5 million National Programme Groningen grant, (ii) €30 million in third-party equity by minority shareholders Groningen consortium² and Worley, together acquiring a 22.6% shareholding in Avantium Renewable Polymers, which represents a post-money valuation for the business unit of €132.5 million, (iii) €90 million in debt financing, and (iv) a €45 million equity investment by Avantium in its subsidiary Avantium Renewable Polymers, of which €26.5 million was already funded at 31 December 2021. The remaining outstanding contribution of €18.5 million to Avantium Renewable Polymers will be settled as part of Financial Close.

In 2021, Avantium Renewable Polymers secured conditional offtake commitments for half of the Flagship Plant's capacity, meeting the second key condition for the positive FID. Avantium now has contracts with speciality chemical company Toyobo (Japan), speciality polyester film producer Terphane (USA), beverage bottling company Refresco (the Netherlands), international rigid packaging supplier Resilux (Belgium) and an undisclosed major global food and beverage brand. Avantium also signed a collaboration agreement with Carlsberg Group in 2021, relating to the joint development of several PEF applications including Carlsberg's Green Fibre Bottle. To this end, Carlsberg decided to join the PEference consortium. In early 2022, world luxury goods leader LVMH Group (Moët Hennessy Louis Vuitton) also joined the PEference consortium, to further explore the potential of PEF as a sustainable packaging solution for LVMH beauty brands.

Avantium also finalised the engineering and supply chain arrangements for the Flagship Plant in 2021, thus fulfilling the third key condition for a positive FID. As planned, the front-end engineering and design (FEED) phase was completed by our engineering partner Worley. Avantium agreed an engineering, procurement and construction (EPC) contract with Worley in December 2021, with a delivery date of the end of 2023. This contract keeps Avantium on track to commence operations at the Flagship Plant in 2024. Avantium also signed a sub-leasehold agreement with Groningen Seaports for the land on which the Flagship Plant will be built. On 1 December 2021, the Groningen Environmental Service (ODG – Omgevingsdienst Groningen) published the draft environmental permit for Avantium's FDCA Flagship Plant, which became irrevocable on 9 March 2022. Following the signing of a multi-year FDCA polymerisation contract with speciality polyester supplier Selenis in 2020, Avantium has now secured a long-term agreement with agricultural cooperative Tereos, which will supply high-fructose syrup as a 100% bio-based and local feedstock for the Flagship Plant.

At the EGM on 25 January 2022, Avantium got overwhelming support from its shareholders for the positive FID. This enables Avantium to execute all relevant documentation, including, the investment documentation with the minority shareholders Groningen Consortium and Worley, and the debt financing documentation necessary to complete the transaction (Financial Close). Upon Financial Close, Avantium Renewable Polymers will be fully funded until the Flagship Plant becomes commercially operational, with the goal of becoming cash flow positive when scale-up of the production of FDCA and PEF at the Flagship Plant is achieved. Avantium expects to successfully reach Financial Close by April 2022.

Avantium Renewable Chemistries

Avantium Renewable Chemistries develops and commercialises innovative chemistry technologies based on viable, non-fossil sources of carbon. The business unit is home to three technologies: Ray Technology™, Dawn Technology™ and Volta Technology.

With its proprietary sugars-to-glycols Ray Technology™, Avantium produces mono-ethylene glycol (MEG) from plant-based feedstock - plantMEG™. MEG is a vital ingredient in the production of polyesters, widely used in textiles and packaging. Ray Technology™ also produces plantMPG™ (mono-propylene glycol), a valuable intermediate used in a wide variety of applications, such as industrial fluids. Having successfully commissioned Avantium's Ray Technology™ demonstration plant in 2020, Avantium Renewable Chemistries successfully validated applications for Ray Technology's plantMEG™ and plantMPG™ in April 2021. Key applications include, polymerisation to PEF and polyethylene terephthalate (PET) polyesters, and functional fluids used for de-icing and heat transfer. Avantium also achieved the significant milestone of

¹ PEference has received funding from the Bio-based Industries Joint Undertaking (JU) under the European Union's Horizon 2020 research and innovation program under grant agreement No744409. The JU receives support from the European Union's Horizon 2020 research and innovation program and the Bio-based Industries Consortium.

² The Groningen consortium comprises Groningen Seaports and regional investment funds NOM (Investment and Development Agency for the Northern Netherlands), Fonds Nieuwe Doen, Investeringsfonds Groningen and Groeifonds.

polymerising Avantium's FDCA with plantMEG™ to produce 100% plant-based PEF, which is further proof of the functional performance of Avantium's plant-based glycols.

In April 2021, Avantium and the Cosun Beet Company signed a term sheet to establish a joint venture to construct a first commercial plant to produce plantMEG™ and plantMPG™ using Ray Technology™. The term sheet describes the intention and conditions for the joint venture, in which the Cosun Beet Company plans to take a substantial share. Together, Avantium and the Cosun Beet Company aim to construct and operate the world's first commercial plant for the production of plant-based glycols, which we believe will be operational in 2026. The joint venture plans to acquire a technology licence from Avantium for Ray Technology™ and aims to establish a long-term supply agreement for the renewable sugar beet feedstock to be used in the commercial glycols plant.

Avantium recorded an accident at the Delfzijl Ray Technology™ demonstration plant in 2021. Two experienced operators were exposed to hazardous vapours as they carried out cleaning activities at the demonstration plant. They reported health complaints afterwards from which they are continuing to recover. Avantium halted operations at the demonstration plant while it carried out the necessary investigations and implemented changes to safety procedures, protocols and adjustments to the design of the Ray Technology™ demonstration plant. Avantium is now in the process of recommencing operations at the demonstration plant. Avantium expects this will not have significant ramifications for the scale-up to commercial manufacturing plants. Full details of the accident and Avantium's response can be found in the Avantium Annual Report 2021.

In the Dawn Technology™ pilot biorefinery in Delfzijl, Avantium converts forestry residues, originating from sustainable forestry management by Staatsbosbeheer, into industrial sugars and lignin. These industrial sugars are used as a raw material for the processes to produce a broad range of chemicals and materials. Lignin can be used for energy generation, and is also suitable for many higher value applications such as for bio-asphalt. In 2021, Avantium continued working to further develop Dawn Technology™ at the Delfzijl pilot biorefinery. Over the past year, Avantium de-risked the technology, explored up- and downstream integration and tested new feedstocks. In June 2021, infrastructure company (and CHAPLIN XL³ consortium member) Roelofs built a test section of public road made with bio-asphalt, which uses Dawn Technology™ lignin to replace fossil-derived bitumen. The new Dawn Drive in Groningen is 250 metres long and contains around 1 tonne of Avantium's lignin.

Also within Avantium Renewable Chemistries, is the Volta platform technology, which converts CO₂ via electrochemistry into high-value ingredients including formic acid, oxalic acid and glycolic acid. In May 2021, Volta Technology was awarded a total grant of €1.78 million by the European Union's Horizon 2020 programme for the development of electrochemical processes and CO₂-based polymers. This will be paid out over a period of four years and covers Avantium's participation in three consortia. CATCO₂NVERS, CO₂SMOS and VIVALDI⁴ all aim to cut the chemical industry's greenhouse gas (GHG) emissions through innovative and integrated technologies, including electrochemistry platforms such as Avantium's Volta Technology.

Avantium's Volta Technology also participates in the OCEAN consortium, which aims to use CO₂ emitted by power plants to produce oxalic acid (which is the basis for various high-value chemicals). To this end, Avantium carried out mechanical and chemical testing on the functionality of a mobile Volta Technology container unit. In January 2022, Avantium installed the unit at a power plant in Germany. During a 6-months period, Avantium aims to convert 250g/hour of CO₂, coming directly from a capture facility located at the power plant itself, into formate. This will in turn serve as a building block for high value products such as plastics. These pre-pilot containers are an ideal way to test Avantium's Volta Technology in real-world applications.

Avantium Catalysis

Just as in 2020, Avantium Catalysis was hampered in 2021 by the ongoing travel restrictions and customers' site closures caused by the pandemic. The Flowrence[®] systems operations were hit particularly hard, with Avantium technicians unable to visit customers' sites to install and commission the catalysis testing platforms. Nevertheless, in August, Avantium successfully completed its first-ever remote installation and

³ The CHAPLIN XL project is a collaboration between multiple industrial and academic parties. The aim of the collaboration is to test a new approach to substantially reduce CO₂ emissions from road construction.

⁴ The CATCO₂NVERS, CO₂SMOS and VIVALDI consortia aim to reduce greenhouse gas emissions (GHG) from industry by developing innovative and integrated technologies based on electrochemical, enzymatic, and thermochemical processes. The consortium programmes have received funding as part of Horizon 2020 Europe under the Food and Natural Resources (FNR) programme under grant agreement No 101000580 (CATCO₂NVERS), No 101000790 (CO₂SMOS) and No 101000441 (VIVALDI).

commissioning of a Flowrence unit in the USA via video link. This success opens up more opportunities to support customers efficiently for as long as travel disruption continues, and even beyond.

Avantium Catalysis also had to contend with disruption to the supply chains of key (sub)components and microchips. However, the Catalysis business unit managed this without a major impact on its operations. Overall, revenues from the Catalysis Systems business in 2021 amounted to €6.8 million.

The challenging global circumstances also affected the Refinery Catalyst Testing services. Demand remained low due to oil refineries running at reduced capacity, which meant they did not need to test new catalyst loads. Overall, the Avantium Catalysis Services business saw a similar level of sales to 2020, and generated €3.2 million in revenues.

Avantium Catalysis is also developing high-throughput solutions for liquid, gas, and respiratory adsorption. In 2021, the Catalysis business unit constructed and delivered a tailor-made testing unit for adsorption to Ircelyon. In the autumn of 2021, Avantium Catalysis joined the PROVE IT⁵ consortium, which aims to make existing CO₂-to-methanol pathways more efficient and consequently to support the reduction of GHG emissions within the chemical industry. As part of this three-year project, Avantium's Flowrence technology will be used to optimise a proven process for catalytically converting off-gas CO₂ into methanol – another significant contribution towards the circular economy. Avantium Catalysis received €291,000 for its participation in PROVE IT as an innovator in catalytic R&D.

Patents

Last year, 14 new patents were granted to Avantium. Additional patent applications were filed on features closely related to the commercial use of YXY[®] Technology, while a number of valuable patents on PEF applications were granted or filed, both in Europe and in the USA.

In February 2021, to build upon our progress towards establishing the YXY[®] Technology Flagship Plant, Avantium Renewable Polymers signed a patent licence agreement with Eastman Chemical Company, giving us the freedom to operate under its FDCA-related patent portfolio.

Further developments in Ray Technology[™] were protected by the filing of several patent applications. Three new patents related to Ray Technology[™] were granted in 2021. Together with the University of Amsterdam, Avantium is also seeking patent protection for new polymers and improved polymerisation methods arising from early-stage research. In 2021, six new patents for early-stage technologies were granted.

Investor Relations and Share Performance 2021

The Avantium share price ended 2021 at €5.40 (31 December 2020: €6.42). The total number of Avantium shares traded in 2021 amounted to approximately 24.9 million shares (25.7 million shares in 2020).

In April 2021, Avantium successfully raised €27.8 million (gross proceeds, €26.4 million net proceeds) in new capital through an overnight accelerated bookbuild offering, targeted at existing institutional shareholders and new institutional investors. Pricing of the capital increase was fixed at €5.35 per share price. The proceeds from this equity raise are to be used primarily for the FDCA Flagship Plant, including funding the balance of Avantium's committed €45 million contribution to Avantium Renewable Polymers equity. The remaining part of the net proceeds are being used for working capital and other general corporate purposes.

Organisation

Management Board Composition

At the Annual General Meeting of Shareholders (AGM) held on 19 May 2021, the shareholders approved the re-appointment of Tom van Aken as CEO and statutory member of the Management Board for a term of four years, ending at the close of the Annual General Meeting to be held in 2025. The Management Board consists of Tom van Aken (CEO) and Bart Welten (CFO).

Supervisory Board Composition

⁵ PROducts of Value from various CO₂ sources, Enabled by Integrating Technologies

Margret Kleinsman was re-appointed as a member of the Supervisory Board for a term of four years at the AGM held on 19 May 2021. In August 2021, the Supervisory Board proposed the appointment of Mr. Nils Björkman as a sixth member of the Supervisory Board. At the EGM held on 25 January 2022, Nils Björkman was appointed as Supervisory Board member for a term of four years. In 2021, the percentage of women on the Supervisory Board was 80%. With the appointment of Nils Björkman, Avantium complies again with the target of at least 30% male or female Supervisory Board members prescribed by Dutch legislation on gender balance.

Due to personal circumstances, Cynthia Arnold has notified the company of her decision to resign as Supervisory Board member as of 31st March 2022. Avantium is discussing with Cynthia ways to continue to have access to her valuable expertise and advice even after her departure from the Supervisory Board. The company will initiate a search process for a new Supervisory Board member.

COVID-19 impact on organisation

In 2021, Avantium closely monitored the Dutch COVID-19 guidelines and acted on all government directions as they continued to change throughout the year. As in 2020, Avantium used stringent hygiene practices in its offices and laboratories to keep people safe. During periods of remote working, the company paid extra attention to the mental and physical health of employees. Avantium continued to supply the equipment and support they needed to carry out their roles safely, comfortably and efficiently, whether at home or in the workplace.

The pandemic has emphasised the importance of embedding flexible working practices. As restrictions were eased and then were re-introduced towards the end of 2021, the company facilitated active dialogues between line managers and their teams on future ways of working at Avantium. The majority of employees expressed a clear preference for flexibility and hybrid-working options. In 2022, management will assess how to best manage this with the right balance of home- and office-working.

Sustainability

In 2021, Avantium began working towards the goals set out in its sustainability plan, Chain Reaction 2030, highlighting the company's ambitious vision to help achieve a fossil-free chemical industry by 2050. It identifies clear and ambitious targets for the future of Avantium's business. These include accelerating the drive for the company's technologies and operations to support the circular economy, and setting an example for responsible and sustainable business practices across the industry. The plan also includes details regarding the company's actions to empower its employees and to excite the next generation to accelerate the transition to a fossil-free world. These time-bound, measurable goals guide the company's decisions, raise accountability and generate tangible results for Avantium and its stakeholders. In the Annual Report 2021, Avantium initiated the reporting on its progress in meeting the outlined sustainability targets.

Financial results

The Avantium 2021 financial statements have been prepared on a going concern basis. Due to its nature as a technology development company with significant R&D expenses and negative cash flows over the past years (2021: €-18.1 million (excluding the April 2021 capital raise), 2020: €-18.8 million) and in the near future, Avantium remains dependent on external funding and regularly needs additional external financing. Fundamental to Avantium's continuity is: (i) the construction of the FDCA Flagship Plant for Avantium Renewable Polymers, for which financing is arranged and for which the Financial Close is planned by April 2022; and (ii) the funding for Avantium as a group excluding Renewable Polymers which includes further development of Avantium's other technologies. This funding has not been secured yet. Failure to achieve new funding in a timely fashion may result in the company being unable to fulfil its obligations or to fund capital expenditure and working capital, all of which are necessary to execute the company's strategy, retain contract partners, retain key employees and meet our payment obligations. Without timely funding, the company's going concern is at risk. This indicates the existence of a material uncertainty in Avantium's ability to continue as a going concern.

Income Statement

In 2021, Avantium's consolidated revenues showed an increase of 11% to €10.9 million (from €9.9 million in 2020). Despite the challenges caused by continuing travel restrictions during 2021, revenues in all of the Avantium business segments improved.

In 2021, income from government grants showed a decrease of 20% from €8.4 million in 2020 to €6.7 million in 2021. The lower grant recognition is predominantly in Avantium Renewable Chemistries and is due to income milestones from two major grant programmes being fully recognised in 2020. The grant income in 2021 is predominantly the result of previously awarded grant programmes (PEference⁶, IMPRESS⁷, Bio-MEG Proeffabriek⁸ and DEI+⁹). Avantium successfully secured additional grants in 2021, including grants for participation in the consortia CATCO₂NVERS, CO₂SMOS and VIVALDI¹⁰.

Net operating expenses amounted to €33.7 million in 2021, an increase of €0.5 million compared to 2020 (€33.2 million). This increase is primarily due to the one-off reversal of an onerous lease provision in 2020. Raw materials and contract costs increased compared to the prior year and are connected to the increase in revenues in 2021. Laboratory expenses decreased compared to the prior year and are related to the delayed start-up of the Ray demonstration plant in Delfzijl.

Total EBITDA decreased from €-14.9 million in 2020 to €-16.1 million in 2021. The EBITDA for 2020 included a one-off reversal of an onerous lease provision of €0.5 million. In Avantium Catalysis, there was an increase in EBITDA as a result of the higher revenues; this was partially offset by an increase in raw materials and contract costs throughout the year. In Avantium Renewable Chemistries, the EBITDA decreased as a result of the lower income from government grants. This was partially compensated by a delay in cost incurred due to the accident in the Delfzijl pilot plant, as well as further measures implemented to control costs. The lower EBITDA of Avantium Renewable Polymers was mainly due to accelerated spending on activities related to the Final Investment Decision concerning the construction of the FDCA Flagship Plant.

Avantium's net loss for the year 2021 amounted to €24.4 million (FY 2020: €22.8 million) due to lower EBITDA and higher depreciation and finance costs.

⁶ PEference is a consortium of organisations aiming to replace a significant share of fossil-based polyesters with the 100% plant-based PEF. The PEference project has received funding from the Bio-based Industries Joint Undertaking (JU) under the European Union's Horizon 2020 research and innovation programme under grant agreement No 744409. The JU receives support from the European Union's Horizon 2020 research and innovation programme and the Bio-based Industries Consortium.

⁷ IMPRESS (grant agreement No 869993) is a consortium of ten organisations aiming to demonstrate a new biorefinery concept based on integrating novel processes such as Avantium's Dawn and Ray Technologies.

⁸ Bio-MEG Proeffabriek is a grant project supported by the European Regional Development Fund (ERDF) through Samenwerkingsverband Noord Nederland (SNN). This grant aims to accelerate innovation in the quest for a low-carbon economy.

⁹ With the Demonstration Energy and Climate Innovation (DEI+) scheme, the Netherlands Enterprise Agency (RVO - Rijksdienst voor Ondernemend Nederland) financially supports projects that contribute to a cost-effective reduction of CO₂ emissions by 2030.

¹⁰ The CATCO₂NVERS, CO₂SMOS and VIVALDI consortia aim to reduce greenhouse gas emissions (GHG) from industry by developing innovative and integrated technologies based on electrochemical, enzymatic, and thermochemical processes. The consortium programmes have received funding as part of Horizon 2020 Europe under the Food and Natural Resources (FNR) programme under grant agreement No 101000580 (CATCO₂NVERS), No 101000790 (CO₂SMOS) and No 101000441 (VIVALDI).

Balance Sheet and Financial Position

The balance sheet total assets increased to €77.7 million (2020: €70.0 million). Total net equity increased to €50.0 million (2020: €46.2 million).

Avantium's cash position (including restricted cash) was €34.9 million as at 31 December 2021 (31 December 2020: €26.6 million). The increase in Avantium's cash position is due to the successful capital raise that took place in April 2021, raising €27.8 million (gross proceeds) through an accelerated bookbuild. Net cash outflow (cash flow excluding capital raise) for the year was €18.1 million (FY 2020: €18.8 million). The decrease of €0.7 million was mainly the result of improvements in working capital management. Furthermore, Avantium invested €5.3 million in capital expenditures during 2021 (2020: €3.5 million), primarily related to the investment in the early EPC work and FEED studies by Avantium Renewable Polymers.

Avantium's changes in working capital in 2021 amounted to a net positive movement of €3.2 million, compared with €1.2 million in 2020. The 2021 positive working capital movement is the result of €0.5 million lower receivables, €1.3 million payable to Eastman for the patent license rights acquired and €1.4 million higher trade and other payables as the company has accelerated spending in preparation to the Financial Investment Decision.

<i>in millions of €</i>	2021	2020
Cash position at the beginning of the year	26.6	45.4
EBITDA	(16.1)	(14.9)
Lease payments	(1.7)	(1.9)
Working capital movement	3.2	1.2
Capital expenditures	(5.3)	(3.5)
Other	1.7	0.3
Net cashflow used in operating, investing and financing activities	(18.1)	(18.8)
Net proceeds from Capital raise	26.4	—
Net increase/(decrease) in cash and cash equivalents	8.3	(18.8)
Cash position at the end of the year	34.9	26.6



Consolidated statement of comprehensive income

<i>in Euro x 1,000</i>	2021	2020
Revenues	10,917	9,863
Other income	6,686	8,403
Total revenues and other income	17,603	18,266
Operating expenses		
Raw materials and contract costs	(3,042)	(2,339)
Employee benefit expenses	(19,226)	(19,262)
Office and housing expenses	(1,968)	(1,990)
Patent, license, legal and advisory expenses	(4,312)	(4,204)
Laboratory expenses	(2,864)	(3,664)
Advertising and representation expenses	(707)	(679)
Reversal due for onerous contract	—	492
Other operating expenses	(1,568)	(1,528)
Net operating expenses	(33,687)	(33,173)
EBITDA	(16,084)	(14,907)
Depreciation, amortisation and impairment charge	(7,837)	(7,597)
EBIT	(23,921)	(22,504)
Finance income	2	37
Finance costs	(497)	(362)
Loss before income tax	(24,416)	(22,830)
Income tax expense	—	—
Loss for the period	(24,416)	(22,830)
Other comprehensive income	—	—
Total comprehensive expense for the year	(24,416)	(22,830)
Loss attributable to:		
Owners of the parent	(24,416)	(22,830)
	(24,416)	(22,830)
Total comprehensive expense attributable to:		
Owners of the parent	(24,416)	(22,830)
	(24,416)	(22,830)



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Press release

Consolidated balance sheet and financial position

in Euro x 1,000	2021	2020
ASSETS		
Non-current assets		
Property, plant and equipment	23,324	25,198
Intangible assets	1,835	559
Right-of-use assets	9,479	9,042
Total non-current assets	34,638	34,799
Current assets		
Inventories	1,238	1,225
Trade and other receivables	6,888	7,333
Cash and cash equivalents	34,911	26,626
Total current assets	43,037	35,184
Total assets	77,675	69,983
EQUITY		
Equity attributable to owners of the parent		
Ordinary shares	3,129	2,591
Share premium	230,252	204,296
Other reserves	11,936	10,407
Accumulated losses	(195,291)	(171,057)
Total equity attributable to the owners of the parent	50,026	46,238
Total equity	50,026	46,238
LIABILITIES		
Non-current liabilities		
Lease liabilities	9,099	8,003
Total non-current liabilities	9,099	8,003
Current liabilities		
Lease liabilities	1,604	1,703
Trade and other payables	16,750	13,894
Provisions for other liabilities and charges	196	145
Total current liabilities	18,550	15,742
Total liabilities	27,649	23,745
Total equity and liabilities	77,675	69,983



Consolidated statement of cash flows

in Euro x 1,000	2021	2020
Cash flows from operating activities		
Loss for the year from continuing operations	(24,416)	(22,830)
Adjustments for:		
– Depreciation of property, plant and equipment	5,778	5,818
– Amortisation	56	152
– Depreciation of right of use assets	2,003	1,589
– Share-based payment	1,711	839
– Finance costs - net	495	325
– Non cash portion of onerous contract reversal	—	(492)
– Impairment of property, plant and equipment	22	38
– Lease adjustment	28	—
Changes in working capital (excluding exchange differences on consolidation):		
– (Increase)/decrease in inventories	(12)	215
– Decrease in trade and other receivables	456	4,251
– Increase/(decrease) in trade and other payables	1,429	(3,228)
– Increase in provisions	51	7
	(12,398)	(13,315)
Interest paid on current accounts	(120)	(69)
Interest received on current accounts	2	37
Other interest and bank charges	(94)	(72)
Net cash used in operating activities	(12,610)	(13,419)
Cash flows from investing activities		
Purchases of property, plant and equipment (PPE)	(3,926)	(3,425)
Purchases of intangible assets	(6)	(27)
Net cash used in investing activities	(3,932)	(3,453)
Cash flow from financing activities		
Net proceeds from Capital raise	26,376	—
Net proceeds of option exercises	117	—
Principal elements of lease payments	(1,663)	(1,946)
Net cash generated from/(used in) financing activities	24,830	(1,946)
Net increase/(decrease) in cash and cash equivalents	8,288	(18,817)
Cash and cash equivalents at beginning of the year	26,626	45,443
Effect of exchange rate changes	(2)	(1)
Cash and cash equivalents from continuing operations at end of financial year	34,911	26,626
Cash and cash equivalents at end of financial year	34,911	26,626

Segment information

EBITDA

EBITDA is an important measure for the company as it measures the financial performance before taking the cost of capital, depreciation and taxes into consideration. EBITDA margins provide a view on the operational efficiency and a more accurate and relevant comparison between peer companies.

The EBITDA figures of the company segments are as follows.

(In Euro x 1,000)	2021	2020
Catalysis	2,705	2,582
Renewable Chemistries	(2,320)	(1,605)
Renewable Polymers	(7,094)	(7,331)
Total EBITDA of business segments	(6,708)	(6,353)

Revenues per segment

Revenue is only generated from external customers and excludes intercompany transaction between segments. No transactions with other segments have taken place.

(In Euro x 1,000)	2021	2020
Catalysis	10,029	9,173
Renewable Chemistries	500	405
Renewable Polymers	388	285
Total segment revenue	10,917	9,863

Other income per segment

(In Euro x 1,000)	2021	2020
Catalysis	279	235
Renewable Chemistries	3,610	5,764
Renewable Polymers	2,683	2,288
Unallocated items	114	116
Total segment other income	6,686	8,403

Reconciliation

(In Euro x 1,000)	2021	2020
Total EBITDA of business segments	(6,708)	(6,353)
Amortisation	(56)	(152)
Depreciation of property, plant and equipment	(5,778)	(5,856)
Depreciation of right of use assets	(2,003)	(1,589)
Finance costs - net	(495)	(325)
Share based compensation	(828)	(895)
Rent	(241)	(179)
Reversal / (Expense) due for onerous contract	—	492
Company overheads/other	(8,307)	(7,971)
Loss before income tax from continuing operations	(24,416)	(22,830)

Events occurring since 31 December 2021

At the EGM held on 25 January 2022, Avantium shareholders granted the requested approvals for all agenda items, including the items related to the positive FID for the construction of the FDCA Flagship Plant taken by Avantium in December 2021. Approval was granted for the authorisation to the Management Board to issue 2.84 million warrants to a consortium of banks as part of a €90 million Debt Financing Package. Approval was also granted for the authorisation to the Management Board to issue €45 million in ordinary shares in connection with a public offering (preferable), rights issue, and/or private placements. This equity raise is required: (i) to allow Avantium to further develop its portfolio of technologies beyond YXY[®] Technology, including for investments in the commercialisation of Avantium's technology programmes, and (ii) for general corporate purposes. The EGM also adopted the amended Articles of Association to increase the authorised share capital of Avantium to allow for the issuances of ordinary shares. Nils Björkman was also appointed as a member of the Supervisory Board.

In February 2022, Avantium published the results of a 2021 ISO-certified Life Cycle Assessment (LCA) for single-layer PEF and multilayer PET/PEF bottles, showing a significant reduction in GHG emissions of around 35% over the full life cycle of the bottles. Moreover, the biogenic nature of the emissions (from renewable carbon) that a PEF bottle would release at end-of-life does not contribute additionally to global warming. Once PEF is commercially available, substantial economic, technological, and environmental improvements are expected within the value chain, leading to further reduction of its environmental impact. More information about the LCA can be found on the Avantium website: www.avantium.com/sustainability/LCA

A 2021 ISO-certified LCA for plantMEG[™] shows that Ray Technology[™] can produce plantMEG[™] with 56–83% lower CO₂ emissions than traditional fossil-based methods. Avantium's plantMEG[™] is thus a far more sustainable alternative than fossil-derived MEG. Crucially, this can be achieved without any compromise on quality or performance. Please visit the Avantium website for more information: <http://www.avantium.com/sustainability/LCA>

In March 2022, Avantium announced that world luxury goods leader LVMH Group (Moët Hennessy Louis Vuitton) and Avantium have agreed to further develop the potential of Avantium's 100% plant-based, recyclable polymer PEF, as a sustainable packaging solution for LVMH beauty brands. To this end, LVMH Beauty will be the first luxury cosmetic company to join the PEference consortium.

Outlook

Avantium closely monitors the geopolitical concerns around the Russian invasion of Ukraine and the substantial impact on the global economy and financial markets, as well as the severe impact on energy and commodity prices (including wheat), adding to inflationary pressures from supply chain disruptions. Avantium fully complies with the Dutch and European sanctions against Russia, which prevail over contractual rights and obligations. Avantium's commercial exposure to Russia is limited to €0.3 million collection risk in Catalysis related to a system that is already delivered. The situation remains highly fluid and the outlook is subject to extraordinary uncertainty, and therefore the ultimate impact on Avantium's business, operations and capital expenditures going forward is still difficult to accurately predict.

Avantium also continues to closely monitor the impact of the COVID-19 pandemic, particularly on travel restrictions.

Avantium is exploring multiple options to strengthen its financial position and provide the company with choices to execute its strategy. As such, Avantium is working on attracting additional sources of financing, consisting of a combination of equity and/or government grants to support the company's operations beyond the next 10 months. Avantium received a mandate from shareholders at the EGM held on 25 January 2022 to raise €45 million in equity. Avantium has appointed a syndicate of banks to manage the capital raise and the process is underway.

In the Renewable Polymers business unit, Avantium expects to successfully reach Financial Close by April 2022, allowing the company to start the construction of the FDCA Flagship Plant. The company believes that construction will be completed in 2023 and that the Flagship Plant will be operational in 2024. Avantium Renewable Polymers has a strong pipeline of new potential opportunities for additional offtake agreements with international partners in the market for high-value PEF applications. Avantium is fully committed to converting these opportunities into additional agreements in order to fully sell out the FDCA Flagship Plant capacity prior to start-up.

Avantium Catalysis is increasingly focused on renewable chemistries and is continuously looking for opportunities to grow its catalysis business in this field.

Calendar and contact details

More information about this press release:

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Presentation of the full year 2021 results on 23 March 2022:

On Wednesday 23 March 2022 at 08:00 am (CET) Avantium will host a conference call for analysts. The transcript of this call will be made available at www.avantium.com.

We recommend reading the press release in combination with the Avantium 2021 Annual Report. The press release, the 2021 Annual Report and the 2021 Remuneration Report are available at www.avantium.com.

Financial calendar 2022

Date	Event
23 March 2022	Publication full-year results 2021 and publication annual report 2021
28 March 2022	Avantium Retail Investor Day (Geleen, The Netherlands)
18 May 2022	Annual General Meeting
17 August 2022	Publication of half-year results 2022

About Avantium

Avantium is a leading technology development company and a forerunner in renewable chemistry. Avantium develops novel technologies based on renewable carbon sources as an alternative to fossil-based chemicals and plastics. The company currently has three technologies at pilot and demonstration phase. The most advanced technology is the YXY[®] plant-to-plastics-technology that catalytically converts plant-based sugars into FDCA (furandicarboxylic acid), the key building block for the sustainable plastic PEF (polyethylene furanoate). Avantium has successfully demonstrated the YXY[®] Technology at its pilot plant in Geleen, the Netherlands, and will start construction of the world's first commercial plant for large-scale production of PEF in 2022. The second technology is Ray Technology[™] and catalytically converts industrial sugars to plant-based MEG (mono-ethylene glycol): plantMEG[™]. Avantium is scaling up its Ray Technology[™] and the demonstration plant in Delfzijl, the Netherlands opened in November 2019. The third technology is called the Dawn Technology[™] that converts non-food biomass into industrial sugars and lignin in order to transition the chemicals and materials industries to non-fossil resources. In 2018, Avantium opened the Dawn Technology[™] pilot biorefinery in Delfzijl, the Netherlands. Next to developing and commercialising renewable chemistry technologies, the company also provides advanced catalysis R&D services and systems to customers in the refinery and chemical industries. Avantium works in partnership with like-minded companies around the globe to create revolutionary renewable chemistry solutions from invention to commercial scale.

Avantium's shares are listed on Euronext Amsterdam and Euronext Brussels (symbol: AVTX). Its offices and headquarters are in Amsterdam, the Netherlands.

This press release by Avantium N.V. contains information that qualified or may have qualified as inside information for the purposes of Article 7 of the Market Abuse Regulation (EU) 596/2014 (MAR).

Forward-looking information / disclaimer

This press release may include forward-looking statements. Other than reported financial results and historical information, all statements included in this press release, including, without limitation, those regarding our financial position, business strategy and management plans and objectives for future operations, are forward-looking statements. These forward-looking statements are based on our current expectations and projections about future events and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. Many of these risks and uncertainties relate to factors that are beyond Avantium's ability to control or estimate precisely, such as future market conditions, the behaviour of other market participants and the actions of governmental regulators. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release and are subject to change without notice. Other than as required by applicable law or the applicable rules of any exchange on which our securities may be traded, we have no intention or obligation to update forward-looking statements.