

Avantium First Half 2020 Results:

"Focus on scaling plants-to-plastics technologies"

AMSTERDAM, 12 August 2020, 07:00 CET - Avantium N.V. (Euronext Amsterdam and Brussels: AVTX), a leading innovative chemical technology company dedicated to developing and commercialising proprietary technologies for the production of chemicals from renewable sources, today reports its 2020 half year results.

Key Business Developments in the First Half of 2020:

- Avantium Renewable Polymers continues to work towards taking an investment decision by the end of 2020 on the construction of a FDCA (furandicarboxylic acid) flagship plant:
 - In January 2020, Chemie Park Delfzijl was selected as the location for the flagship plant;
 - In the second quarter of 2020, the second part of the engineering phase (front-end engineering design) of the FDCA flagship plant commenced;
 - Discussions with potential strategic partners are ongoing.
- In the first half of 2020, Avantium Renewable Chemistries successfully completed commissioning and start-up of its plant-based MEG (mono-ethylene glycol) demonstration plant.
- Avantium Catalysis recorded €4.0 million revenues in the first half-year of 2020 (HY 2019:
 €4.6 million). This 15% year-on-year decline is attributable to the impact of COVID-19.

Key Financial Developments in the First Half of 2020:

- In the first half of 2020, total revenues and other income¹ increased from €7.1 million to €8.8 million. Consolidated first half 2020 revenues decreased by €0.9 million to €4.3 million (HY 2019: €5.2 million), €0.6 million of this decrease relates to Avantium Catalysis. Other income increased by €2.6 million to €4.5 million (HY 2019: €1.9 million), due to higher grant recognition.
- The net loss for H1 2020 was €11.0 million (HY 2019: €12.6 million).
- Operating expenses decreased to €15.7 million (HY 2019: €16.4 million including a €0.7 million one-time cost for an onerous contract). Depreciation, amortisation & impairment charges increased by €1.0 million due to growth investments.
- The cash position was €34.7 million on 30 June 2020 (31 December 2019: €45.4 million).
- Cash outflow in the first half of 2020 was €10.7 million versus €30.2 million in the first half of 2019. Excluding the one-off exit payment to BASF of €17.4 million made in early 2019, cash flow improved by €2.0 million.

Tom van Aken, Chief Executive Officer of Avantium, comments: "We have focused our efforts on the execution of our strategy of commercialising our plants-to-plastics technologies. We continue to work towards making an investment decision on the FDCA flagship plant by the end of the year, and our plant-based MEG demonstration facility is now operating. With three pilot plants operational we

¹ Total revenues and other income consists of revenue earned through operations and other income by government grants. Finance income is included as part of net finance cost.



have made good progress in developing and diversifying our business. We have recorded somewhat lower revenues in our Catalysis business, and we have taken steps to offset this by effectively managing our cash without loss of focus or compromising our progress.

The health and safety of our employees, partners and contractors has been our top priority throughout the coronavirus pandemic. We adopted stringent measures early on to minimise the risks of transmission. In the first half of 2020, the COVID-19 pandemic had limited impact on our business."

Impact of COVID-19

COVID-19 has led to unprecedented global challenges. Avantium responded quickly to the COVID-19 pandemic, initiating stringent protocols to increase already strict hygiene and safety precautions in our offices, laboratories and pilot plants, in order to protecting the health and well-being of our employees and partners. In line with directions from the Dutch government, we initially asked our office employees to work from home, though now, again under strict guidelines, employees are spending at least some time in the office. Our critical laboratory and plant operations have continued running smoothly under the newly implemented protocol since the start of the coronavirus pandemic.

Global travel restrictions have a clear impact on our Catalysis business as we have been unable to install and maintain our Flowrence® systems at our customers' sites. In the first half year of 2020, Avantium Catalysis recorded ≤ 4.0 million in revenues, mostly from systems and longer-term service contracts. This is a small decrease compared to the first half year of 2019 (≤ 4.6 million).

Our Renewable Chemistries and Renewable Polymers business units have been able to deliver on their respective strategic objectives and have not been unduly impacted by COVID-19.

Business Overview

Avantium focuses on commercialising its two lead products, FDCA (furandicarboxylic acid) and plant-based MEG (mono-ethylene glycol), the two building blocks to produce PEF (polyethylene furanoate). We focus on scaling up FDCA to commercial scale first, followed by the commercialisation of plant-based MEG.

Avantium Renewable Polymers

YXY® Technology, producing FDCA, the main building block for PEF

Our lead programme uses YXY® Technology to catalytically convert industrial sugars into FDCA, a key chemical building block to produce the new plant-based and fully recyclable plastic material PEF. Due to its excellent functionality, PEF is expected to be used in a variety of high-value applications. In beverage bottles, PEF provides a barrier layer for better performance and recyclability; in flexible packaging, PEF replaces multilayer materials with a single layer of PEF, reducing the cost of packaging and enabling recycling instead of incineration; and PEF can be used in specialty films for electronics and displays (LCD/OLED).

Avantium wishes to build a flagship plant with a planned annual capacity of 5 kilotonnes FDCA. The plant is planned to start-up in 2023. Avantium estimates the total funding need of the flagship plant to be approximately €150 million. Our goal is to have the financing for the construction and start-up of the flagship plant in place before the end of 2020.



In January 2020, Avantium Renewable Polymers announced that it had signed a Letter of Intent with a regional consortium² to locate the flagship plant at Chemie Park Delfzijl, the Netherlands. The regional consortium members and Avantium Renewable Polymers also signed a Letter of Intent for a conditional financing of €30 million for the flagship plant (grants, equity and debt). In December 2019, Avantium confirmed an important financing milestone to support the building of the flagship FDCA plant with the reconfirmation of the €25 million "PEFerence" grant.

In the first half year of 2020, Avantium has focused its efforts on securing the next financing milestone by having discussions with various potential strategic partners. In parallel to its efforts to obtain equity commitments from strategic partners, Avantium is in discussions with banks to secure commercial debt as part of the financing of the flagship plant.

In addition to equity commitments, a second pillar for a positive final investment decision is the engineering design work for the FDCA flagship plant. In March 2020, leading engineering company Worley completed the concept development phase of the engineering (process design package) and Avantium decided to initiate the second engineering phase (front-end-engineering and design - FEED) of the flagship plant. Worley aims to complete the FEED by the end of 2020.

Besides financing discussions for the FDCA plant with strategic partners, Avantium is also in discussions with brand owners on capacity allocations of the planned flagship plant. Avantium aims to obtain off-take commitments from market parties in high-value applications who want to shift to plant-based packaging. These potential partners include both niche users that require PEF's unique functionality, and premium first movers in larger markets.

Market interest for PEF is high with its powerful combination of environmental attributes, circularity options and performance features. The market interest is in line with the growing demand for innovative and sustainable technologies to help alleviate serious environmental problems such as climate change and plastic waste. Consumers are increasingly more conscious about the sustainability of products, their packaging and their production methods and have become more vocal in demanding accountability from manufacturers and brand owners. This became abundantly clear in May 2020 when the UK newspaper *The Guardian* published an article about Avantium's PEF and the solutions offered by the novel material. This article was not only circulated by numerous global media outlets, but was also frequently shared on social media.

Avantium Renewable Chemistries

The Renewable Chemistries business unit develops innovative chemistry technologies that utilise renewable sources of carbon instead of fossil carbon. The three technologies of Avantium Renewable Chemistries focus on innovative plant-based chemicals and materials as well as converting carbon dioxide (CO_2) as a carbon source to valuable and sustainable products.

Ray Technology™, producing plant-based MEG (mono-ethylene glycol)

Avantium's proprietary Ray Technology™ converts industrial sugars into plant-based mono-ethylene glycol (bioMEG) in a unique single step process. MEG is a significant building block for the production

 $^{^2}$ The regional consortium comprises the Province of Groningen, Groningen Seaports and regional investment funds NOM (Investment and Development Agency for the Northern Netherlands), FondsNieuweDoen, Investeringsfonds Groningen and Groeifonds.



of many materials, including polyesters used in everyday products such as textiles and bottles made from PET (polyethylene terephthalate) or PEF. In November 2019, Avantium opened a demonstration plant for the production of plant-based MEG in Delfzijl, the Netherlands. This demonstration plant is a pre-commercial facility with a capacity of 10 tonnes of plant-based MEG per year. The objective of the demonstration plant is to scale up the technology, to further optimise the technology and to validate the economics and product applications. The end-to-end demonstration plant will cover all process steps from sugars to glycols, allowing for the production of MEG samples. In the first half of 2020, Avantium successfully completed commissioning and start-up of the plant-based MEG demonstration plant. Avantium has already produced its first plant-based MEG, demonstrating the catalytic sugar conversion step at a more than 100 times larger scale than previously.

Avantium is in partnership discussions with parties throughout the value chain with the objective to bring Ray Technology $^{\text{TM}}$ to full-scale global commercialisation. We particularly target feedstock providers who wish to diversify their markets. We also focus on chemical companies with the aspiration to transition to fossil-free chemicals and consumer brands who are looking for plant-based solutions for textiles and packaging.

Dawn Technology™, converting non-food biomass into industrial sugars for renewable chemical and material production

Avantium's Dawn Technology™ produces industrial sugars and lignin from forestry and agricultural residues. These industrial sugars are used as a raw material for chemical and fermentation processes to produce a broad range of chemicals and materials. Lignin is a main constituent of woody biomass and is well suited for energy generation. It is also suitable for many higher value applications including asphalt for road construction.

In 2018, Avantium opened a pilot biorefinery in Delfzijl, the Netherlands. Since its opening, Avantium has continued to run the Dawn Technology pilot biorefinery, with a focus on operational excellence. Trial runs using feedstocks from several partners have helped us to further optimise the technology.

In April 2020, Avantium announced that the Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland) has awarded the company 0.5 million to produce lignin for the development of biobased asphalt. Avantium participates in the CHAPLIN XL project, which is a collaboration between multiple industrial and academic parties. The aim of the collaboration is to test a new approach to substantially reduce 0.2 emissions from road construction by using lignin as a substitute for fossil-based bitumen in asphalt. The CHAPLIN XL project will test the lignin-based asphalt at large scale by paving four test roads in the Netherlands during 2020. These include a section of road at Groningen Seaports in the north of the Netherlands. 'Dawn Drive' as it is referred to by Avantium is made from lignin produced by Avantium's Dawn pilot biorefinery.

Volta Technology, converting CO₂ to chemicals via electrochemistry

Avantium's Volta program is a platform technology that uses electrochemistry to convert CO_2 to high value products and chemical building blocks such as Glyoxylic Acid and Glycolic Acid. These products are predominantly used in cosmetics and polyesters.

³ The CHAPLIN XL project members comprise academic and industrial organisations. Besides Avantium, other project members are Utrecht University, Wageningen Food & Biobased Research, Asfalt Kennis Centrium, H4A Infratechniek, Roelofs Groep and Stichting Biobased Delta.



Avantium Catalysis

Avantium Catalysis provides advanced catalysis R&D Services & Systems to international blue-chip companies. The Services R&D business provides in-house customised contract research projects. The Systems business comprises Avantium's unique and advanced Flowrence® high-throughput catalyst testing systems, which are tailored to accelerate catalyst screening and to study catalyst deactivation.

Over the last half year, as a direct result of the COVID-19 outbreak, travel restrictions hampered the Catalysis business, with personnel unable to travel to customers to install and maintain the Flowrence® systems. Despite these challenges, Avantium Catalysis recorded relatively stable revenues of €4.0 million in the first half of 2020 (HY 2019: €4.6 million).

Avantium Catalysis customers are multinational companies with a long-term focus and investment in innovation. Several of these companies are industry leaders. In April 2020, JPC, a Japanese Mitsubishi Chemical Corporation subsidiary, selected Avantium to support their polymer catalyst research with Avantium's multi-parallel batch platform. Within the scope of this project, the Catalysis business unit will expand the functionality of its batch platform to meet the specific requirements of JPC, and subsequently execute multi-parallel catalyst testing in its laboratories in Amsterdam. Work for JBC is progressing throughout 2020.

In H1 2020, Avantium also announced that Avantium Catalysis received orders for several Flowrence® testing systems worth more than €3 million from King Abdullah University of Science and Technology – KAUST Catalysis Center (KCC) in Saudi Arabia. KCC is an existing Flowrence® customer and has ordered the additional units to expand its R&D capacity for heterogeneous catalyst testing.

In the second quarter of 2020, Avantium Catalysis virtually launched a new parallel high-pressure reactor system: the Batchington. This Batchington platform is a smaller scale unit in comparison with the Flowrence® units and enables customers to accelerate R&D by screening and optimisation experiments. The Batchington was launched at the virtual exhibition Laborama in June 2020.

AScX Index

In March 2020, Avantium was promoted to the Euronext Amsterdam SmallCap Index (AScX), following the quarterly review by Euronext. The AScX index consists of the 25 listed companies that – in terms of size – make up the number 51-75 companies on the Dutch stock exchange.

Management Board Composition

At the Annual General Meeting of Shareholders (AGM) held on 14 May 2020, the shareholders approved the appointment of Bart Welten as statutory member of the Management Board for a term of four years. The Management Board now consists of Tom van Aken (CEO) and Bart Welten (CFO).

Supervisory Board Composition

The Annual General Meeting of Shareholders (AGM) held on 14 May 2020 also approved the appointment of Michelle Jou as member of the Supervisory Board for a term of four years. The Supervisory Board now consists of Dr. Edwin Moses (chairman), Margret Kleinsman, Denis Lucquin and Michelle Jou. On 20 May 2020, Avantium announced the nomination of Dr. Cynthia Arnold and



Dr. Trudy Schoolenberg for appointment to its Supervisory Board. The Supervisory Board will propose the appointments to an Extraordinary General Meeting of Shareholders (EGM), to be held on 30 September 2020 in Amsterdam.

Financial results

Consolidated Statement of Comprehensive Income and Segment Reporting

In the first half of 2020, Avantium's total revenues and other income increased from €7.1 million in HY 2019 to €8.8 million. Consolidated first half year other income increased from €1.9 million to €4.5 million, due to higher grant recognition resulting from three newly awarded grant programmes (PEFerence, IMPRESS and ERDF)⁴. Grant recognition improved in all business units with Renewable Chemistries at €1.6 million, Renewable Polymers at €0.8 million and Catalysis at €0.1 million. First half year revenues decreased from €5.2 million to €4.3 million, of which € 0.6 million of the decrease relates to Avantium Catalysis.

Operating expenses decreased to \leq 15.7 million (HY 2019: \leq 16.4 million including a \leq 0.7 million one-time cost for an onerous contract). Depreciation, amortisation & impairment charges increased by to \leq 1.0 million due to growth investments.

Total EBITDA went up from €-9.3 million in the first half of 2019 to €-6.9 million in the first half of 2020. The EBITDA of Catalysis increased slightly as a result of cost control and an increase in other income from government grants. The higher EBITDA of Avantium Renewable Chemistries and Renewable Polymers was mainly due to other income from several government grants.

The net result for the first half year of 2020 is €-11.0 million (HY 2019: €-12.6 million).

Balance Sheet and Financial Position

Balance sheet total as at 30 June 2020 decreased to €79.4 million (31 December 2019: €96.5 million) with net equity of €57.5 million. Cash and cash equivalents amounted to €34.7 million on 30 June 2020 (31 December 2019: €45.4 million).

Outlook

Avantium remains focussed on delivering on its strategic objectives. For Avantium Renewable Polymers, discussions with strategic partners to invest in the FDCA flagship plant are ongoing. We aim to make a final investment decision on the FDCA plant by the end of 2020.

⁴ **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 under Bio Based Industries Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 744409. **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. The RAY™ demonstration plant is supported by a grant from the **European Regional Development Fund (EFRD)** through Samenwerkingsverband Noord Nederland (SNN). This grant aims to accelerate innovation in the quest for a low-carbon economy.



Risks

The management team of Avantium regularly reviews the risk profile of the company and has done so in the first half of 2020 and will continue this practice in the future. For those risks deemed material, comprehensive mitigation action plans are developed and reviewed by the management team.

The risks as outlined in the risk management paragraph of the Avantium N.V. 2019 annual report remain valid and continue to require focused attention in the second half of 2020.

In the first half of 2020, we have seen uncertainties and volatility following the COVID-19 worldwide outbreak. A prolonged pandemic may impact the financial performance of the company and its ability to attract funding and partnerships for the commercialisation of the technologies in the Renewable Polymers and Renewable Chemistries businesses and the ability of Avantium Catalysis to close certain sales transactions.

Auditor's Involvement

This Interim Report for the six months ended 30 June 2020, and the Condensed consolidated financial statements included herein have not been audited by an external auditor.

Management Board compliance statement

The Management Board of Avantium N.V. declares that, to the best of its knowledge, the condensed consolidated financial statements give a true and fair view of the assets, liabilities, financial position and the result of Avantium N.V. and its subsidiaries included in the condensed consolidated financial statements and the interim report includes a fair review of the information required pursuant to section 5:25d, subsections 8 and 9 of the Dutch Financial Markets Supervision Act (Wet op het financial toezicht).

Amsterdam, 12 August 2020,

Tom van Aken, Chief Executive Officer Bart Welten, Chief Financial Officer





Condensed consolidated statement of comprehensive income

(In Euro x 1,000)	Half-year	
	2020	2019
Revenues	4,294	5,219
Other income	4,474	
Total revenues and other income	8,769	1,903 7,122
Operating expenses		
Raw materials and contract costs	(791)	(1,426)
Employee benefit expenses	(9,673)	(9,939)
Office and housing expenses	(903)	(463)
Patent, license, legal and advisory expenses	(1,613)	(1,458)
Laboratory expenses	(1,837)	(1,469)
Advertising and representation expenses	(449)	(644)
Expense due for onerous contract	_	(724)
Other operating expenses	(440)	(265)
Net operating expenses	(15,706)	(16,389)
Ebitda	(6,937)	(9,267)
Depreciation, amortisation and impairment charge	(3,875)	(2,914)
Ebit	(10,812)	(12,181)
Net finance costs	(140)	(166)
Share in loss of joint ventures	(140)	(166) (259)
Loss before income tax	(10,952)	(12,607)
Income tax expense	(10,952)	(12,007)
Loss for the half-year	(10,952)	(12,607)
Other comprehensive income		
Total comprehensive expense for the period	(10,952)	(12,607)
		_
Loss attributable to:		
Owners of the parent	(10,952)	(12,607)
	(10,952)	(12,607)
Total comprehensive expense attributable to:	(10.050)	(10.60=)
Owners of the parent	(10,952)	(12,607)
	(10,952)	(12,607)
Earnings per share for profit attributable to the ordinary	30 June 2020	30 June 2019
equity holders of the company	(euro)	(euro)
Basic earnings per share	(0.42)	(0.49)
Diluted earnings per share	(0.42)	(0.49)





Condensed consolidated statement of financial position

(In Euro x 1,000)	30 June	31 December
	2020	2019
Assets		
Non-current assets		
Property, plant and equipment	25,992	27,677
Intangible assets	638	684
Right of use asset	9,099	9,732
Total non-current assets	35,729	38,092
Current assets		
Inventories	1,334	1,440
Trade and other receivables	7,590	11,541
Cash and cash equivalents	34,697	45,443
Total current assets	43,621	58,425
Total assets	79,350	96,517
Liabilities		
Non-current liabilities	0.455	
Lease liabilities	8,655	9,264
Total non-current liabilities	8,655	9,264
Current liabilities		. == .
Lease liabilities	1,645	1,534
Trade and other payables	11,357	17,367
Provisions for other liabilities and charges	145	137
Total current liabilities	13,147	19,038
Total liabilities	21,803	28,303
Total liabilities	21,803	28,303
Equity		
Equity attributable to owners of the parent		
Ordinary shares	2,583	2,583
Share premium	204,296	204,296
Other reserves	10,068	9,862
Accumulated losses	(159,400)	(148,527)
Total equity attributable to the owners of the parent	57,547	68,215
Total equity and liabilities	79,350	96,517



Condensed consolidated statement of changes in equity

(In Euro x 1,000)		Attributable to	equity holde	rs of the company	
	Ordinary shares	Share Oth premium	er reserves	Accumulated losses	Total Equity
Balance at 1 January 2019	2,583	204,296	9,331	(125,053)	91,157
Comprehensive income Result for the half-year Other Comprehensive income for the half-year	-	-	-	(12,607)	(12,607)
Total Comprehensive income for the half-year	-	-	-	(12,607)	(12,607)
Transactions with owners					
- Employee share schemes - value of Employee services	-	-	347	-	347
- Transfer value share scheme to retained earnings	-	-	(16)	16	-
- Issue of ordinary shares	1	-		-	1
Total transactions with owners Balance at 30 June 2019	2.504	-	331	16	348
Balance at 30 June 2019	2,584	204,296	9,662	(137,643)	78,899
Balance at 1 January 2020	2,583	204,296	9,863	(148,527)	68,215
Comprehensive income Result for the half-year	-	-	-	(10,952)	(10,952)
Other Comprehensive income for the half-year	-	-			
Total Comprehensive income for the half-year	-	-	-	(10,952)	(10,952)
Transactions with owners - Employee share schemes – value of Employee services	-	-	280	-	280
- Issue of ordinary shares	-	-	-	-	-
- Shares delivered from treasury shares	-	-	5	-	-
- Transfer value share scheme to retained earnings	-	-	(79)	79	_
Total transactions with owners		-	206	79	280
Balance at 30 June 2020	2,583	204,296	10,068	(159,400)	57,547





Condensed consolidated statement of cash flows

(In Euro x 1,000)	Half-year	
	2020	2019
Cash flows from operating activities		
Loss for the half-year	(10,952)	(12,607)
Adjustments for:	(==)	(==/00/)
- Depreciation of PPE	2,938	1,965
- Amortisation	73	97
- Depreciation of right of use assets	826	851
- Share of loss in joint ventures	-	259
- Share-based payment	280	347
- Finance costs - net	140	166 724
- Onerous contract expenses - Impairment of PPE	- 57	724
Changes in working capital (excluding exchange differences on	37	
consolidation):		
- Decrease/(Increase) in inventories	106	18
- Decrease/(Increase) in trade and other receivables	3,951	(338)
- (Decrease)/Increase in trade and other payables	(5,764)	1,558
- (Decrease)/Increase in provisions	8	(13,079)
	(8,337)	(20,038)
Interest (paid)	(74)	(50)
Net cash used in operating activities	(8,411)	(20,088)
•		
Cash flows from investing activities		
Purchases of property, plant and equipment (PPE)	(1,198)	(4,191)
Purchases of intangible assets	(27)	(99)
Payment for acquisition of subsidiary, net of cash acquired	- (4.00=)	(4,188)
Net cash used in investing activities	(1,225)	(8,478)
Cash flow from financing activities		
Interest received	40	79
Proceeds from issuance of ordinary shares	-	-
Principal elements of lease payments	(1,149)	(1,681)
Net cash generated from financing activities	(1,109)	(1,602)
Net decrease in cash and cash equivalent	(10,745)	(30,168)
Cash and cash equivalents at beginning of the year	45,443	83,302
Effect of exchange rate changes	(1)	(8)
Cash and cash equivalents from at end of half-year	34,697	53,127



Notes to the condensed financial statements

1. General information

Avantium N.V. ('the company') and its subsidiaries (together 'the group') is a company limited by shares, incorporated and domiciled in The Netherlands. Its registered office and principal place of business is at Zekeringstraat 29, 1014 BV in Amsterdam.

The information in these condensed consolidated interim financial statements ("financial statements") is unaudited.

2. Accounting policies

Basis of preparation of half-year report

The information is reported on half-year-to-date basis ending 30 June 2020. Where material to an understanding of the period starting 1 January 2020 and ending 30 June 2020, further information is disclosed. The interim financial statements were discussed and approved by the Management Board and the Supervisory Board. The interim financial statements have not been audited.

The interim financial statements should be read in conjunction with Avantium N.V.'s consolidated financial statements in the 2019 annual report as approved on 25 March 2020, which has been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and IFRS Interpretations Committee (IFRS IC) applicable to companies reporting under IFRS. The interim financial statements have been prepared in accordance with IAS 34 'Interim financial reporting'.

The significant accounting policies applied in these consolidated interim financial statements are consistent with those applied in Avantium N.V.'s consolidated financial statements in the 2019 annual report for the year ended 31 December 2019.

3. Segment information

Revenue is only generated from external customers and no transactions with other segments have taken place.

Half-Year

Revenues per segment

(In Euro x 1,000)	2020	2019
Catalysis Renewable Chemistries Renewable Polymers	3,964 255 75	4,606 450 163
Total segment revenue	4,294	5,219



Other income per segment

	Half-Year	
(In Euro x 1,000)	2020	2019
Catalysis	118	-
Renewable Chemistries	3,166	1,528
Renewable Polymers	1,137	310
Support	53	64
Total segment other income	4,474	1,903

EBITDA

The main KPI of the company within the profit & loss account is EBITDA. Note that the EBITDA figure excludes company shared services and overheads.

The EBITDA is calculated in the following manner: Operating profit/loss + depreciation & amortisation

The EBITDA figures of the company segments are as follows.

	Half-Year	
(In Euro x 1,000)	2020	2019
Catalysis	902	775
Renewable Chemistries	(415)	(1,673)
Renewable Polymers	(3,050)	(3,657)
Total EBITDA of business segments	(2,564)	(4,555)

Reconciliation

	Half-Year		
(In Euro x 1,000)	2020	2019	
Total EBITDA of business segments	(2,564)	(4,555)	
Amortisation	(73)	(97)	
Depreciation	(3,802)	(2,816)	
Finance costs - net	(140)	(166)	
Share based compensation	(280)	(347)	
Rent	-	355	
Share in loss of joint ventures	-	(259)	
Expense for onerous contract	-	(724)	
Other	(4,094)	(3,997)	
Profit before income tax	(10,952)	(12,607)	

The 'Other' costs category comprises mainly of company overheads and shared service departments costs. The increase in other costs in 2020 is mainly due to an increase in wages, due to organisational growth and investments in the company's operating segments.



4. Related party transactions

Except as disclosed below, there are no material changes to the company's related parties, related party transactions (including their terms and conditions) and (future) obligations towards related parties, compared to 31 December 2019.

At the Annual General Meeting of Shareholders (AGM) held on 14 May 2020, the shareholders approved the appointment of Bart Welten as statutory member of the Management Board for a term of four years. The Management Board now consists of Tom van Aken (CEO) and Bart Welten (CFO).

During 2020, the composition of the Supervisory Board changed, since during the Annual General Meeting of Shareholders (AGM) held on 14 May 2020 the appointment of Michelle Jou as member of the Supervisory Board was approved for a term of four years. The Supervisory Board now consists of Dr. Edwin Moses (chairman), Margret Kleinsman, Denis Lucquin and Michelle Jou. On 20 May 2020, Avantium announced the nomination of Dr. Cynthia Arnold and Dr. Trudy Schoolenberg for appointment to its Supervisory Board. The Supervisory Board will propose the appointments to an Extraordinary General Meeting of Shareholders (EGM), to be held on 30 September 2020 in Amsterdam.

During the first half of 2020, 418,500 additional options awards were approved and awarded under the company's Employee Stock Options Plan (ESOP).

In addition, 92,240 shares were granted to management under the company's Long-Term Incentive Plan (LTIP). These awards consist of 46,120 Investment shares and 46,120 Matching shares.

Calendar and contact details

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On Wednesday 12 August 2020 at 08:00 am (CET) Avantium will host a conference call for analysts. The interim report and transcript of the analyst call will be available at www.avantium.com

Financial calendar 2020/2021

Date	Event
30 September 2020	Extraordinary General Meeting
24 March 2021	Publication full-year results 2020 and publication annual report 2020
19 May 2021	Annual General Meeting
11 August 2021	Publication of half-year results 2021

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 a wide range of chemicals and plastics, such as PEF



(polyethylene furanoate). Avantium has successfully demonstrated the YXY Technology® at its pilot plant in Geleen, the Netherlands. The second technology is 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. The third technology is called Ray Technology™ and catalytically converts industrial sugars to plant-based MEG (mono-ethylene glycol). Avantium is scaling up its Ray Technology™ and the demonstration plant in Delfzijl, the Netherlands opened on November 7, 2019. 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 likeminded 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). Avantium is included in the Euronext Amsterdam SmallCap Index (AScX). Its offices and headquarters are in Amsterdam, the Netherlands.

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.