



avantium

Avantium

Sustainability Manifesto

2020

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About Avantium

Avantium, headquartered in Amsterdam, The Netherlands, is a pioneer in the emerging industry of renewable and sustainable chemistry. We call ourselves a serial technology developer. We seek to take part in the opportunities for the transition towards a circular economy with the goal of creating value for our stakeholders and society as a whole.

Avantium's mission is to accelerate the transition to a fossil-free world by developing ground-breaking products on the basis of renewable feedstock instead of fossil resources. Sustainable alternatives for fossil-based chemicals and materials include plastic bottles for drinks, films for food packaging and electronics, fibres for textiles and even materials used in toys.

Our Story

Foreword

Tom van Aken
CEO, Avantium

The global climate breakdown demands an entirely new way of doing business, moving the world from its dependence on fossil-based resources towards a more sustainable future. Avantium is focused specifically on accelerating that transition, and as CEO it is both a privilege and a challenge to lead our company's mission to help our customers and partners embrace the essential technologies of the future.

At Avantium, sustainability is not an afterthought, a department, or a new venture. It is built into our very purpose and has been throughout our young history. It drives our colleagues, informs our technology development, and excites our commercial partners. It is a privilege to lead a company with the potential to be one of the global laboratories for the innovation and transformation that has never been more urgent, as the scale of the climate crisis becomes increasingly clear. Every technology we develop affirms our commitment to helping create a fossil-free future for the planet.

I want us to be ever more ambitious in our thinking, and this Sustainability Manifesto lays out a pathway to achieving our mission. We do not claim to have all the answers, nor can we solve these global challenges alone. But I want us to set out clearly our approach to environmental best practice, social justice and transparency, as well as a roadmap of future activities. This is important to guide our teams as we continue to embed sustainability into our day-to-day business operations. It is also vital so that our sustainability performance can be continuously improved as we engage our many stakeholders, be they investors, commercial partners, civil society, employees and the general public. I am fully committed to accountability in all we do.

Like all companies, we face many challenges in achieving the scale and pace of change demanded by the scientific consensus on climate change. Regulatory frameworks must also evolve to harness the potential of disrupting business as usual. I am determined that Avantium will play its role, and look forward to working with all those who share our values to build a better world for future generations.

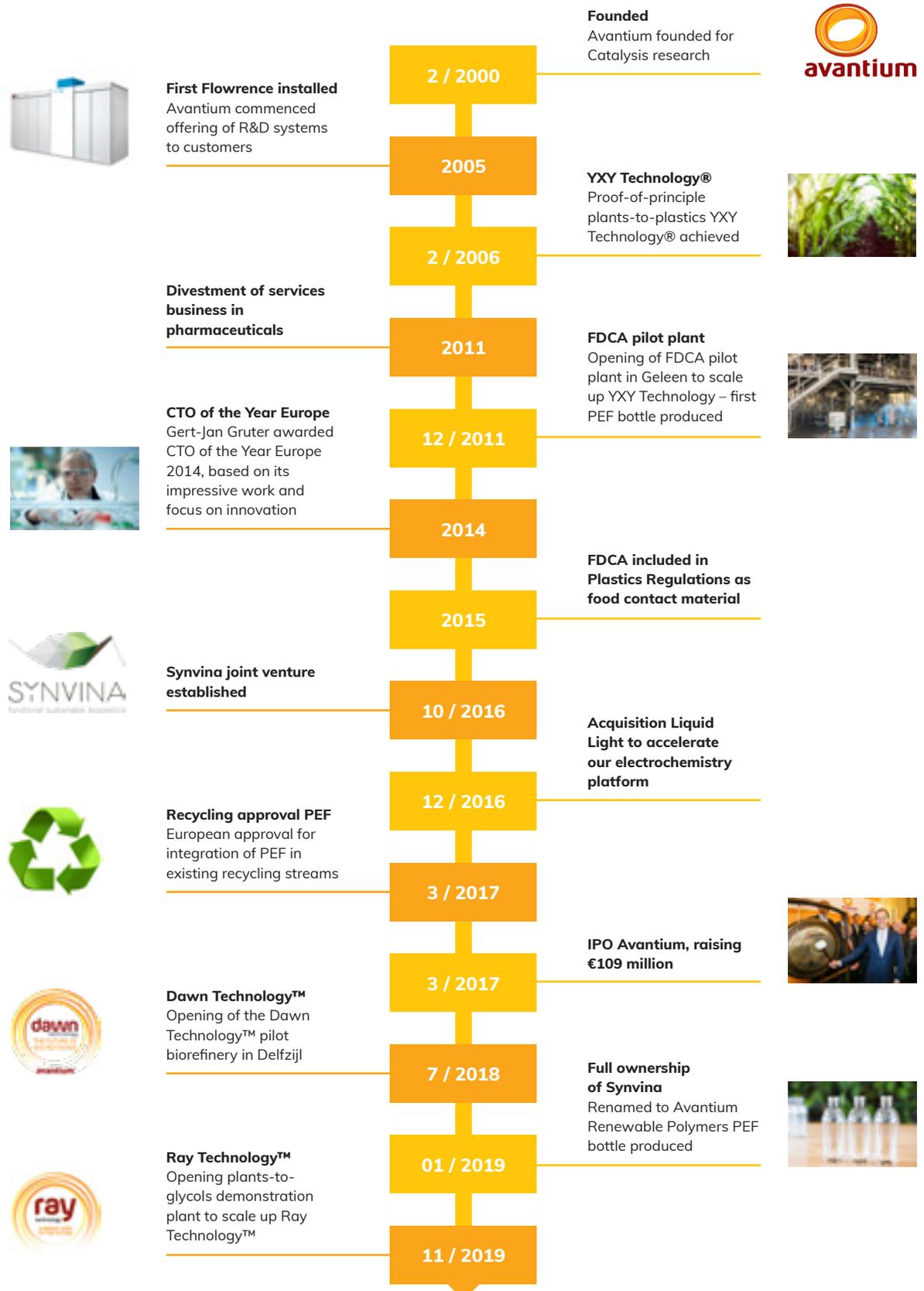
Vision & Mission

We create disruptive technologies, bringing them to the world with partners to accelerate the transition towards renewable and circular products. We foster a safe and vibrant place to make an impact.

WE BELIEVE IN A FOSSIL-FREE WORLD

LET'S GO

COMPANY TIMELINE





Sustainability Approach

GOLDEN SUSTAINABILITY RULES

Our approach to sustainability will be governed by the following principles. These are our 'Golden Rules', placing our work towards a fossil-free world at the forefront of everything we do.



Supporting communities



We support and strive to improve the communities in which we operate and live



Systemic transformation



We use our voice to advocate for the systemic transformation needed to tackle the climate breakdown



Responsibility for environmental impact



We develop our technologies and processes with utmost responsibility to their environmental impact



Progressive partnerships



We support progressive partnerships with companies, government agencies, NGOs and academia to develop consistent measurement and make continuous progress



Dialogue with stakeholders



We engage in regular & meaningful dialogue with our stakeholders



Transparency



We are transparent and clear about our technologies and processes



Supply chain integrity



We are committed to supply chain integrity and sustainability excellence



Better the world



We seek to better the world by making a lasting positive impact

We structure our sustainability priorities under
THREE PILLARS



By the end of 2020, we will develop and publish a time-bound action plan setting out ambitious 2030 targets across all these areas. This plan will be developed in consultation with our stakeholders.

KEY SUSTAINABILITY ACTIVITIES

Pending that broader sustainability plan, here are the key activities to which we are committing:

01

Embed our new Avantium Sustainability Manifesto throughout the company and socialize it amongst our key stakeholders.

pillars: 2 3

02

Define the company's overall materiality and 'sustainability footprint'

pillars: 1 2 3

03

Agree achievable stretch goals, targets and metrics for each of the 15 areas within our sustainability framework

pillars: 1 2 3

04

Outline a 10-year time-bound implementation plan including key milestones for delivery of our goals.

pillars: 1 2 3

05

Embed sustainability performance in employees' annual appraisals and Board responsibilities

pillars: 2 3

06

Create a reporting framework that ensures regular updates on our progress in meeting our commitments

pillars: 3

07

Boost the remit of our internal 'Team for Green' to further stretch our internal sustainability policies and programmes

pillars: 1

KEY SUSTAINABILITY ACTIVITIES

Pending that broader sustainability plan, here are the key activities to which we are committing:

<p>08</p> <p>Consult with key external stakeholders to inform our 10 year sustainability plan</p> <p>pillars:</p> <p>1 2 3</p>		<p>09</p> <p>Publish relevant data in peer-reviewed journals and other publications</p> <p>pillars:</p> <p>1 3</p>
	<p>10</p> <p>Continue to commission independent life-cycle analyses (LCAs) on our technologies, processes and products</p> <p>pillars:</p> <p>1</p>	
<p>11</p> <p>Identify and support the needs of the communities in which we operate</p> <p>pillars:</p> <p>2</p>		<p>12</p> <p>Resource our sustainability plans appropriately</p> <p>pillars:</p> <p>2</p>
	<p>13</p> <p>Increase our advocacy efforts towards a fossil-free world in all relevant regulatory, civil society and industry fora, to create a more supportive policy framework</p> <p>pillars:</p> <p>3</p>	
<p>14</p> <p>Boost our work with educational establishments to encourage scientific and renewable chemistries knowledge, and enable the next generation of leading experts to flourish in the transition to a fossil-free world.</p> <p>pillars:</p> <p>1 2</p>		<p>15</p> <p>Publish a sustainable sourcing policy and roll it out to our suppliers</p> <p>pillars:</p> <p>2</p>

Case Study

Mobilising a new generation of scientists

Avantium uses its scientific expertise to excite the next generation about sustainability and renewable chemistry. We have opened our laboratories to students, showcasing sustainable materials and demonstrating how our company works to advance new technologies for a more sustainable future, including the role of PEF in the circular economy. We have held an open 'Weekend of Science' to attract young students' attention to the opportunity innovation will play in the journey to a fossil-free world. In 2018, Avantium contributed to the final Chemistry Examination paper for high schools across the Netherlands.

We have two Professors working at Avantium: In 2016, our Chief Technology Officer Dr G.J.M. Gruter, was appointed extra-ordinary professor of Industrial Sustainable Chemistry (ISC) at the Van't Hoff Institute for Molecular Sciences (HIMS), one of eight research institutes of the Faculty of Science (FNWI) of the University of Amsterdam.

Dr. Klaas Jan Schouten, program leader for Avantium's leading electrochemistry program Volta, has been appointed as Research Assistant Professor Electrocatalysis and Applied Electrochemistry at the University of Amsterdam. Avantium has a well established collaboration with the University to accelerate the development of new products and processes using electrochemistry and connecting the company to important pioneering research.

Several PhD students are working on their theses at Avantium, whilst contributing to the development of our technologies.

Avantium is also working with the University of Amsterdam's Psychology Research Institute. PhD students in Social Psychology research Sustainable Consumer Behavior, investigating the psychology of green consumer habits, such as the public's willingness to pay a premium for greener packaging.



Case Study

Promoting Greener Employee Travel

Under our Avantium Mobility Plan, we encourage the use of public transport wherever possible. Employees choosing to travel by public transport receive an NS Business Travel Card, enabling employees to travel for free for all work and personal transport across the Netherlands, including train, metro, tram and bus travel, as well as use of the OV bike system.

Employees who travel to work by bicycle are offered the chance to buy a bicycle through the Company bicycle plan. Once every three years, each employee can purchase a bicycle through the company provided that this bicycle is predominantly used for commuter travel.

Members of the Avantium Management Team are eligible to use the company's fleet of Electric Vehicles.



In Focus: Turning Ideas into Reality



Catalysis

Avantium's catalysis business provides advanced catalysis R&D Services, R&D Systems and Refinery Catalyst Testing. A catalyst is a substance that will increase the rate of a chemical reaction. As such, catalysts are essential to making a wide variety of chemical processes industrially and commercially viable and more efficient. Catalysts in general play an enormous role in limiting the environmental harm of the (petro-)chemical industry. Avantium Catalysis supports our customers in their transition to a more sustainable business. Through its R&D Services business, Avantium Catalysis supports companies in reaching their sustainability, profitability and growth targets by providing customised catalyst testing and catalysis research expertise, working from its R&D facilities in Amsterdam. In this way,

Avantium has enabled its customers to make numerous catalyst inventions and develop innovative and improved chemical processes.

Avantium's long established knowledge of catalysis has allowed our Renewable Chemistries and Renewable Polymers business to benefit from the expertise and experience that Avantium has built up through the execution of more than 100 catalytic development projects. Additionally, the high-tech infrastructure of Catalysis enables the parallel testing of catalysts and process conditions providing the business functions that serve as a learning organisation for Avantium. Avantium Catalysis is the foundation that enables the development of novel proprietary technologies.

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Avantium has enabled its customers to make numerous catalyst inventions and develop innovative and improved chemical processes

YXY® Technology

From Demonstration Plant to Scale

Avantium has developed the proprietary plants-to-plastics YXY Technology to catalytically convert plant-based sugars into FDCA (dicarboxylic Furan Acid), a key building block to make PEF (Polyethylene Furanoate). PEF is a 100% plant-based, 100% recyclable plastic with superior performance properties compared with today's widely used petroleum-based packaging materials. The PEF polymer itself has been known for a long time, but has never been produced at large scale or applied commercially as there were no economically viable production routes to manufacture the key monomer FDCA. Currently, Avantium is working on new methods of producing FDCA, which will enable PEF to become a new widespread polymer for the future.

In 2011, Avantium was the first company to build an FDCA pilot plant. This plant enabled Avantium to produce FDCA and PEF, further developing its YXY Technology, enabling testing to improve the economics of the process and to strengthen its engineering features in preparation for scale-up to commercial and industrial scale. In June 2019, Avantium announced the intent to build a flagship plant with a planned annual capacity of 5 kilotons of FDCA (built, owned and operated by Avantium) and 5 kilotons of PEF (produced in collaboration with other commercial partners), which is slated for a 2023 start-up.



In 2011, Avantium was the first company to build an FDCA pilot plant



Performance

The YXY Technology’s 100% plant-based lead application, PEF, is a polymer which outperforms today’s widely used packaging plastics, such as PET. PEF has superior barrier properties resulting in longer-lasting carbonated drinks and extended shelf life of packaged products. It makes certain coatings required to enhance the barrier performance of PET redundant. Secondly, PEF is 100% recyclable and therewith outperforms coated/multilayer plastics, which in many cases cannot be recycled. Thirdly, in terms of thermal properties, PEF is considered more attractive than PET due to its superior ability to withstand heat and its ability to be processed at lower temperatures.

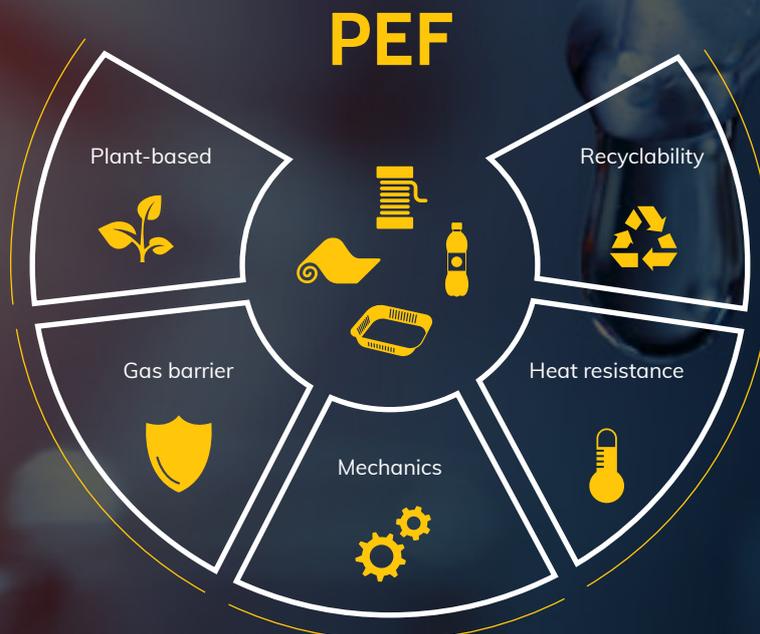
Furthermore, PEF has enhanced mechanical stiffness and allows for increasing shaping possibilities. In combination with the plant-based feedstock, that added functionality gives PEF all the attributes required to become the next-generation polyester, superior to conventional PET.

End-of-Life of PEF

PEF is designed for recycling and reuse and therefore it fits perfectly in a circular economy. In many regions around the globe, recyclability of everyday materials is of prime interest and industry and government organisations are setting ambitious recycling targets. For example in the EU, by 2030 all beverage bottles will need to contain at least 30 % of recycled material. Obtaining high quality PET waste is essential to achieve those recycling targets but is also notoriously difficult. One of the main challenges is that most

polymers used in combination with PET hamper its recyclability. A typical example is a multilayer bottle that uses Polyamide as a barrier layer. The Polyamide disturbs the output of a mechanical recycling process and induces haze in the r-PET. Less than 2% of polyamide in a PET waste stream can cause so much haze that the r-PET is rendered unusable (a bottle with 5% polyamide as barrier layer is considered not recyclable). PEF is chemically so similar to PET that it blends well during the recycling process, forming a co-polymer and therefore causing very little disturbance in the resulting r-PET; a PET/PEF mixture will stay almost completely transparent with up to 5 % PEF. This makes PEF highly suitable for combinations with PET without affecting its recyclability. PEF can also be recycled solely by itself using technology used for PET.

If human behaviour results in unplanned and undesired leakage of PEF into our environment, first results of tests by Organic Waste Systems (OWS) (Gent, Belgium) show that PEF degrades much faster than PET under industrial composting conditions (250-400 days @ 58°C in soil). The biodegradability of PEF in the natural environment (Amsterdam, the Netherlands) is under investigation via a 10-year field trial and we observed that degradation starts within the first year. PEF biodegradation does not occur during normal use of PEF. Only when a PEF product unintentionally ends up in nature, do the presence of bacteria and fungi will cause it to degrade. How quickly the degradation happens depends on environmental conditions (e.g. moisture (rain), heat, sunlight).



PEF- Changing the Nature of Plastics for Good

PEF has the potential to replace various packaging materials such as PET, glass or aluminum in typical applications like bottles for soft drinks, water, alcoholic beverages and fruit juices. PEF also addresses additional applications in the film and fiber market. Illustratively, the end markets for these packaging materials represent an aggregate annual turnover of over US\$200 billion.

Avantium’s flagship plant will allow market entry in high-value applications. This includes specialty films that can be used in electronics and displays (LCD/OLED), PEF-enhanced bottles for premium beverages and cosmetics, and plant-based packaging. PEF is ideally suited to compete on performance and command the best price in these applications. As we progress our learning curve and increase scale in the future, PEF will be able to compete in high-volume markets, including bottles for carbonated soft drinks and other beverages.

YXY Technology®



Market potential

> € 200 billion market potential

Source: Canadean (2013)

Ray Technology™

Ray Technology is Avantium's plants-to-glycols technology producing plant-based mono-ethylene glycol (MEG), a fossil-free core component for everyday products such as textiles or plastic materials like PET and PEF. MEG is a key ingredient in products such as plastic bottles and clothing.

Today, more than 99% of MEG is produced from petroleum with a market value of about \$25 billion. Ray Technology aims to produce plant-based MEG that is chemically identical to petroleum-based MEG and competitive in terms of cost and quality. Avantium's Ray Technology delivers an environmentally sustainable and cost-effective plant-based alternative for fossil MEG, producing it in a single-step process from industrial sugars.

This direct pathway from sugars to MEG makes Avantium's plant-based MEG cost-competitive with fossil based alternatives, while reducing the supply chain's

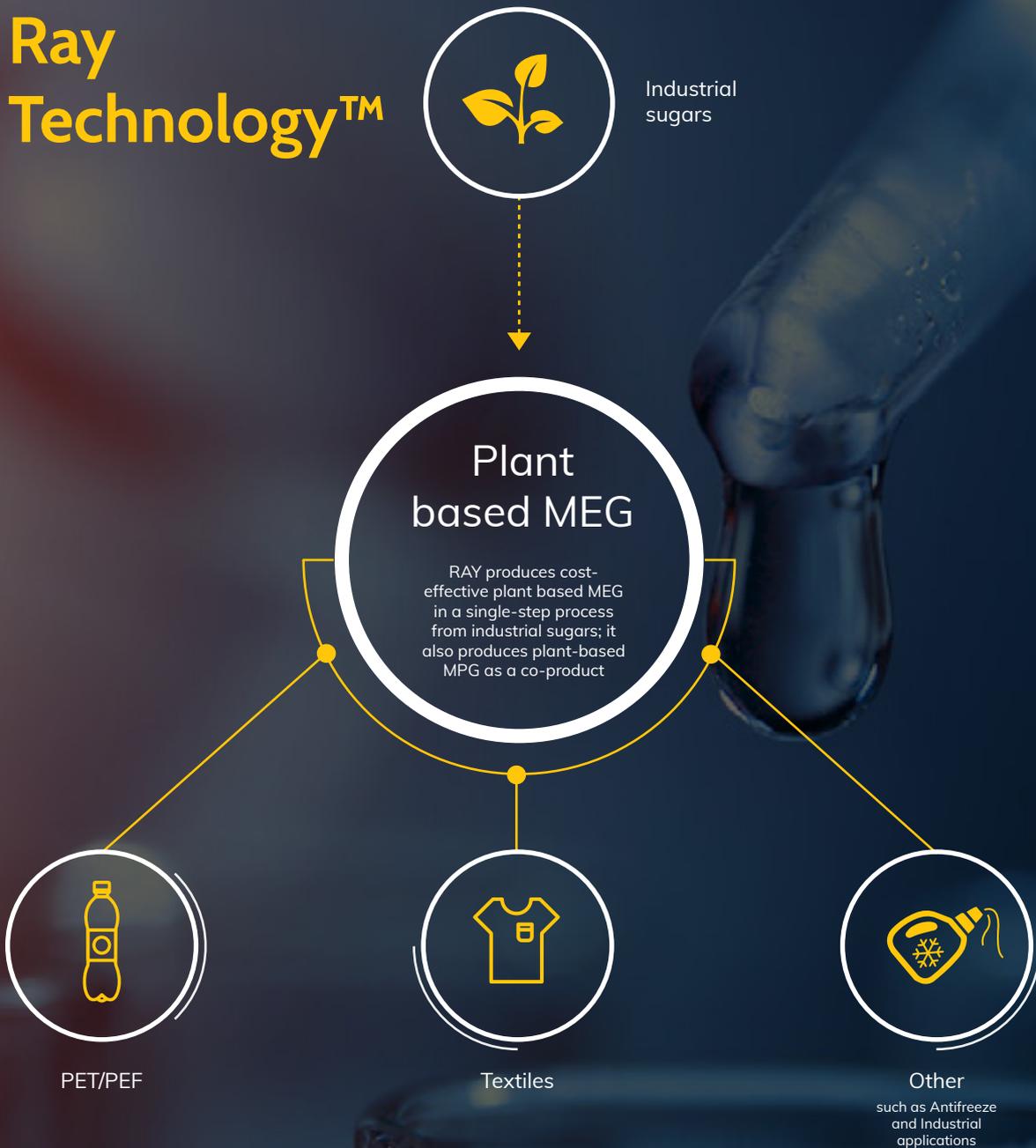
dependence on fossil feedstocks. Avantium will use sugars from various 1st generation feedstock such as sugar beet, sugar cane, wheat and corn. When available, 2nd generation non-food feedstock such as forestry or agricultural residues can be used. Avantium has invented a process for producing these sugars called Dawn Technology™.

Internal calculations show that the process to produce plant-based MEG by Avantium's Ray Technology significantly reduces the CO₂ equivalent versus traditional processes to produce fossil-based MEG. If you consider the source – plants instead of oil-based, internal calculations show that the production of plant-based MEG by Avantium's Ray Technology reduces the CO₂ equivalent with around 70% versus traditional production of fossil-based MEG. This equates to taking a half million passenger cars off the road for each plant. This internal calculation will be validated by an independent Life Cycle Analysis (LCA).

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Ray Technology is a highly efficient one-step process with a maximum theoretical yield of 100% and a practical yield of over 70%

Ray Technology™



In November 2019, Avantium opened a demonstration plant in Delfzijl, the Netherlands, with an annual capacity of around 10 tons of plant-based MEG. The objective of the demonstration plant is to scale up the technology from lab scale to further optimise the technology and validate the product applications. Avantium also plans to collect data to execute an environmental LCA quantifying the sustainability benefits of our Ray Technology. The end-to-end demonstration plant will cover all process steps from

sugars to glycols, which will allow for the production of MEG and mono-propylene glycol (MPG) samples that are representative of the final product produced at subsequent commercial plants. In this way, the demonstration plant can act as a flywheel for commercial developments. The demonstration plant will also produce several tons of plant-based MPG as a co-product. MPG is used in multiple applications in a variety of industries, such as polyesters, cosmetics, pharmaceuticals, food flavouring and de-icing.

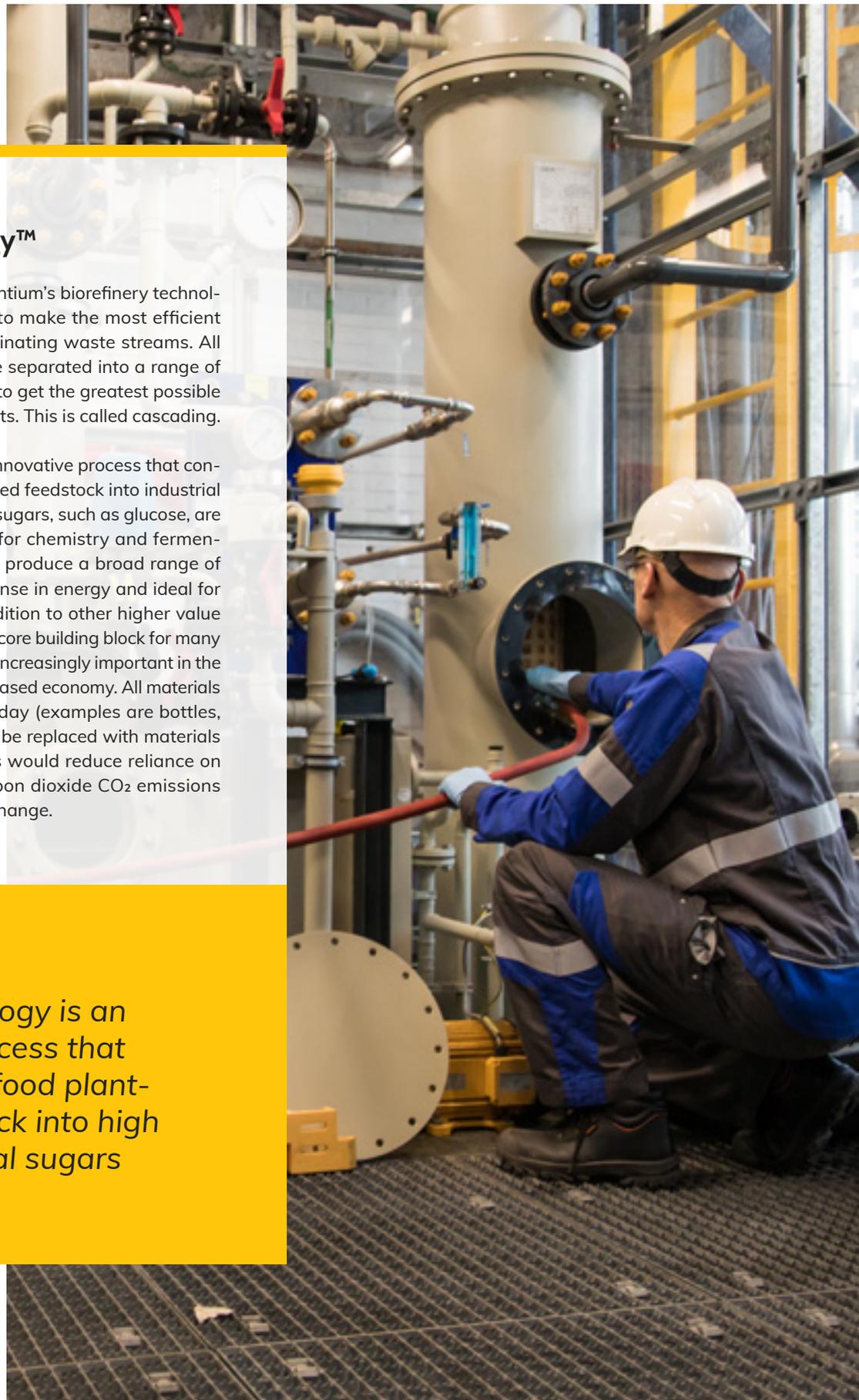
Dawn Technology™

Dawn Technology is Avantium's biorefinery technology. A biorefinery aims to make the most efficient use of biomass and eliminating waste streams. All biomass constituents are separated into a range of products and the goal is to get the greatest possible value out of these products. This is called cascading.

Dawn Technology is an innovative process that converts non-food plant-based feedstock into industrial sugars and lignin. These sugars, such as glucose, are excellent raw materials for chemistry and fermentation processes used to produce a broad range of products. The lignin is dense in energy and ideal for energy generation in addition to other higher value applications. Glucose is a core building block for many industrial products and is increasingly important in the transition towards a bio-based economy. All materials made from petroleum today (examples are bottles, t-shirts and carpets) can be replaced with materials made from glucose. This would reduce reliance on petroleum, mitigate carbon dioxide CO₂ emissions and help tackle climate change.



Dawn Technology is an innovative process that converts non-food plant-based feedstock into high purity industrial sugars and lignin





Today, glucose is predominantly produced from food sources such as corn, wheat, sugar beet and sugar cane. Dawn Technology unlocks the glucose available in non-food agricultural and forestry residues such as wood chips, wheat straw or corn stover. The Dawn Technology biorefinery produces three main product streams:

1. **Glucose.** Dawn Technology is differentiated from other technologies in its ability to produce high purity glucose. There is no source of high purity glucose from non-food, plant-based feedstock commercially available today.
2. **Mixed sugars.** In addition to glucose, the mixed sugar stream contains a number of other valuable sugars such as xylose, mannose and galactose. Mixed sugars are suitable as feedstock for fermentation processes used to make products such as ethanol, vitamins and acetic acid.
3. **Lignin.** Lignin is the compound that is left once the sugars have been taken out of the original raw material. It is more efficient for energy generation as its energy content is up to 40% higher than the original wood chips used in the process. Energy generation is currently the predominant application for lignin. Additional higher value applications are being developed.

Dawn technology is an innovative and modern development of an industrial process that has been proven at commercial scale since the 1930s. Avantium has radically improved this process through proprietary inventions. The technology uses acid to selectively separate the sugar streams from the feedstock material (i.e. the agricultural or forestry residues). Avantium's proprietary inventions reduce water consumption by 70% with significantly reduced energy consumption. This not only manages the environmental footprint of the process but also improves the cost profile of the resulting products.

In July 2018, Avantium opened a pilot biorefinery in Delfzijl, the Netherlands, with a maximum capacity of processing 20 tons of dry wood chips per year. The objective of the pilot biorefinery is to scale up the technology, validate the economics, and further optimize the technology and application development. Avantium has founded a consortium of partners committed to developing a commercial biorefinery in Delfzijl that will tap into locally available expertise, utilities and infrastructure. The consortium consists of Nouryon, RWE, Staatsbosbeheer and Chemport Europe, each bringing specific expertise and functionality to the

biorefinery. This consortium functions as an industrial ecosystem. Avantium aims to license its proprietary Dawn Technology. Potential partners around the world have expressed interest in licensing Dawn Technology for local deployment. These partners aim to add value in the form of industrial sugars to their current available feedstocks. Dawn Technology is feedstock flexible allowing future biorefineries to use its own locally sourced non-food biomass. The Delfzijl biorefinery will serve as a demonstration facility for these future biorefineries.

Dawn Technology™

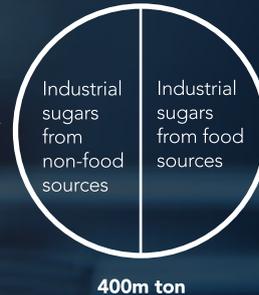


Market potential

2019 industrial sugar production



2050 industrial sugar demand



Materials only (excluded food) if 20% fossil-free

Industrial sugars from non-food sources

Volta Technology

Avantium's Volta technology is the leading electro-catalytic platform developing carbon dioxide utilization solutions for a circular future. It converts CO₂ to higher value chemicals, building blocks and eventually fuels. The current Volta platform has been developed by bolstering Avantium's existing electro-catalytic know-how with the acquisition of Liquid Light Inc in 2016.

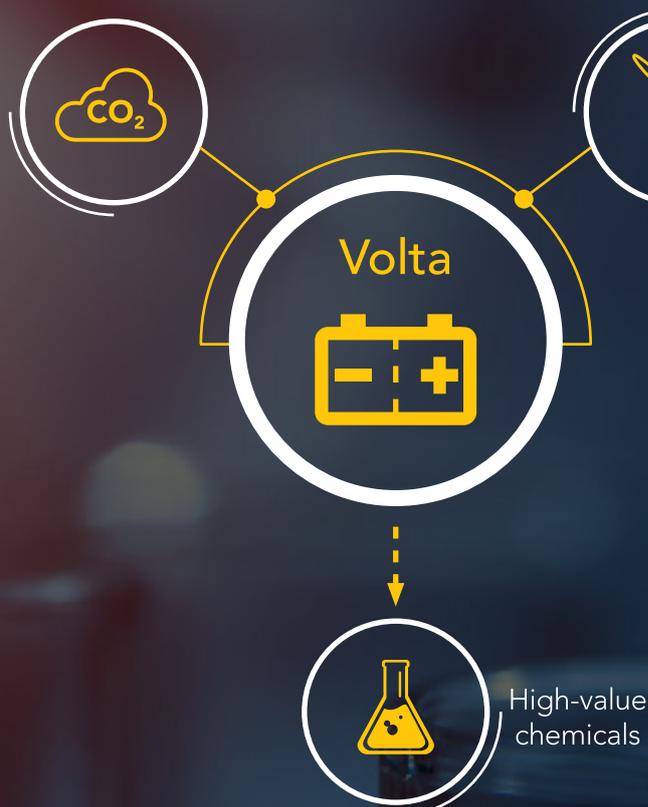
CO₂ is a greenhouse gas that originates as waste from the burning of fossil fuels, the production of electricity, fertilisers, chemicals, steel and cement. It is the biggest contributor to global warming. The

development of electrochemistry has the potential to use CO₂ as a feedstock for the sustainable production of chemicals and materials, and is seen as a 'game-changer' for the chemical industry. The result is that greenhouse gas is sequestered into products that can replace plastics and chemicals that are now produced from fossil feedstock.

The Volta technology program progresses at Avantium's laboratories in the Amsterdam Science Park. The pre-scale pilot equipment is tested at Prodock in the Amsterdam harbor.

Volta Technology

Converting CO₂ to high value chemicals via electrochemistry





Case Study

Biodegradation Field Tests

The first results of tests by OWS (Organic Waste Systems, Gent Belgium) show that PEF degrades much faster than PET under industrial composting conditions (full biodegradation in 250-400 days at 58°C in soil). The biodegradability of PEF in the natural environment (Amsterdam, the Netherlands) is under investigation via a 10-year field trial and we have observed that degradation starts within the first year. PEF biodegradation does not occur during normal use of PEF. Only when a PEF product unintentionally ends up in nature, do the presence of bacteria and fungi will cause it to degrade. How quickly the degradation happens depends on environmental conditions (e.g. moisture (rain), heat, sunlight).

Life Cycle Analysis:

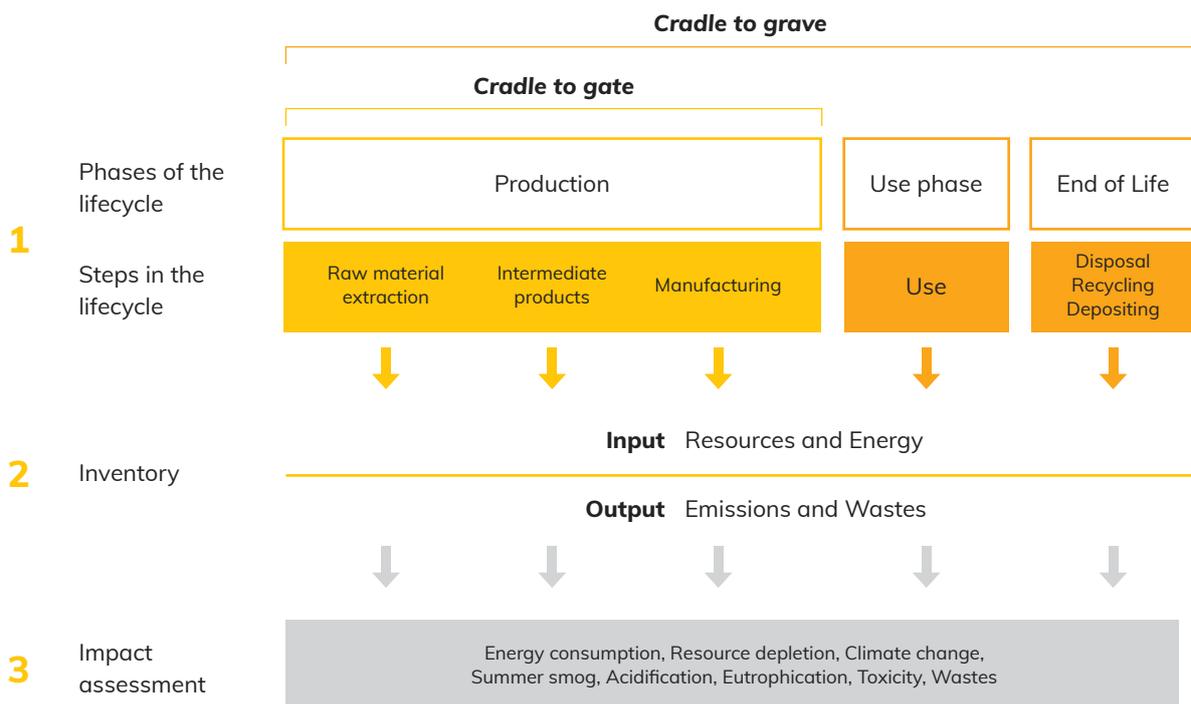
The building block for
impact measurement

Life Cycle Analysis (LCA) is fundamental to understanding how Avantium's technologies compete with fossil-based alternatives. LCAs form the bedrock of how we measure our footprint and the potential sustainability benefits of our innovations.

Ray Technology LCA

Avantium is working with the German firm Thinkstep (a Sphera company) to evaluate the sustainability of Ray Technology. Thinkstep will deploy LCA methodology (see diagram) to calculate environmental impact.

Depending on where the boundary of the assessment is set, an LCA can use a “cradle to gate” approach, (meaning from production until factory gate), or it can employ the “cradle to grave” approach (which incorporates the product’s use phase and end of life as well). The life cycle phases themselves consist of several smaller steps. For example, raw material extraction, intermediate products and final manufacturing all count within the production phase. For the Ray Technology process Thinkstep will use a “cradle to gate” approach because the products of Ray Technology are so-called “drop-in” products, chemically identical to their fossil-based counterparts.



YXY Technology LCA

Avantium has conducted an initial Global Warming Potential (GWP) evaluation of the YXY process in collaboration with the Copernicus Institute at the University of Utrecht (Eerhart et al. 2012). The German-based nova-Institut is currently performing a broader LCA taking into consideration various PEF based applications and additional sustainability denominators. FDCA and PEF are both novel molecules with unique as well as improved characteristics compared with the incumbent fossil-based molecules. Therefore, for the YXY process nova-Institut will use

a “cradle to grave” approach. The comparison will be made over the complete value-chain including specific packaging solutions.

Simplification of a packaging solution has a big impact on its intrinsic Global Warming Potential. Having a recyclable packaging solution offers the opportunity to reduce GWP. Technology improvements leading to resource efficiency also have a positive impact on cost structure.

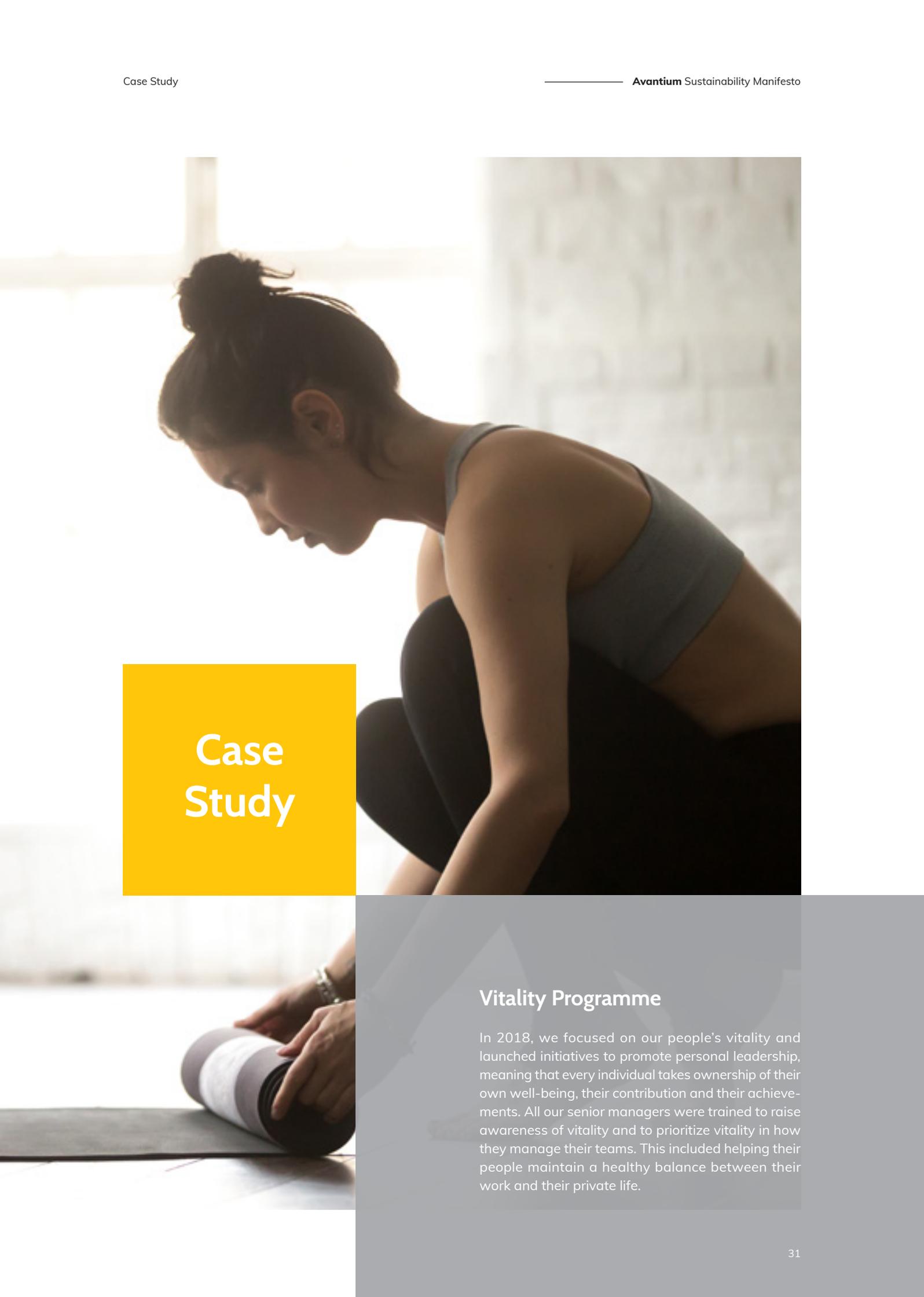




Case Study

Team for Green

'Team for Green' is a group of Avantium employees, drawn from across the company, who drive 'bottom up' environmental initiatives to enhance sustainability implementation at our company's headquarters in Amsterdam. Recent initiatives include improved policies and practices on waste and recycling, drinking water use, as well as making recommendations on greater access for bicycles and the use of green energy to power the building. The team hosts awareness events, including lectures, film screenings and environmental quizzes. It acts as the voice of employees on green issues and meets with the company's CEO every two months to make recommendations and raise relevant concerns. Current members of the team include scientists, technologists, engineers, HR practitioners, along with staff from Business Development and project leaders from all key business units. The team ensures regular features in Avantium's internal newsletter to keep awareness high amongst all those who work for the company.

A woman with her hair in a bun, wearing a grey tank top and black leggings, is kneeling on a dark mat. She is rolling up a grey and white yoga mat. The background is a bright, out-of-focus window with a white brick wall.

Case Study

Vitality Programme

In 2018, we focused on our people's vitality and launched initiatives to promote personal leadership, meaning that every individual takes ownership of their own well-being, their contribution and their achievements. All our senior managers were trained to raise awareness of vitality and to prioritize vitality in how they manage their teams. This included helping their people maintain a healthy balance between their work and their private life.



Responsible Business Foundations

The following areas are fundamental to embedding responsibility into the core of our day-to-day business operations. They are foundational pillars for our continued success and we take them extremely seriously.

SAFETY GOLDEN RULES

Safety is woven into everything that we do. All Avantium employees are committed to our list of 'Golden Safety Rules'. We have long-established procedures and systems in place, but we all know that it requires continuous attention and awareness to ensure that we always operate in a safe manner.



We are responsible for our own safety, and that of others



We give and accept feedback, we ask when in doubt



We take the time to work in a safe way



We learn from our mistakes and those of others



We make sure our work area is clean and tidy



We use the right protective equipment



We assure immediate containment of unsafe situations



We report every unsafe situation

RESPONSIBLE BUSINESS POLICIES

We pride ourselves on being a responsible business, and have published a number of additional policies on our website at www.avantium.com These include the following:

Code of Good Business Conduct

This code covers a range of areas including but not limited to integrity at work, age discrimination, working conditions, equal opportunities, conflicts of interest, privacy, financial practices, discrimination, harassment and bullying, and complaints procedures.

Whistleblower Policy

Setting out the procedures under which employees can and must report relevant irregularities.

Bilateral Contacts Policy

This policy covers contact and information-sharing with shareholders.

Additional documents available on the Avantium website include the company's Articles of Association, Supervisory Board Terms of Reference, and the regulations governing the activities of the Nomination, Audit and Remuneration Committees.

Into Action:

Implementing our
Sustainability Manifesto



Into Action: Implementing our Sustainability Manifesto

Zanna McFerson
Managing Director, Renewable Chemistries

I am delighted to be the Avantium Management Team member sponsoring the efforts on sustainability and responsible for the delivery of our Sustainability Manifesto. As the person accountable for the scale up and commercialisation of Avantium's renewable chemistries, I am determined to embed our guiding principles into the DNA of all our operations. For me, sustainability is a mind set; it must permeate each stage of what we do, from laboratory concept to large-scale industrial implementation.

In practice, this means looking in depth at our processes, from source to end outcomes. It means being mindful of our impact and defining the appropriate metrics, validating them, and collecting data. We can only know our true footprint if it is measured and independently verified.

The next stage in Avantium's evolution is to operationalize this manifesto by creating a bold and ambitious ten year sustainability plan that will formalize our endeavour. For us to succeed, we seek out partners who share our hunger for disruption and the transformation to a fossil-free world. We want to partners who are changemakers, share our values and are guided by the same end goals. Our technologies must be used responsibly and our licensing arrangements will reflect this imperative.

Internally, I will ensure we empower and enable our teams of dedicated and skilled colleagues to deliver on the behaviors and goals enshrined in this Manifesto. It is the compass by which we will turn our scientific innovation into the industrial transformation the world requires. I look forward to reporting back on our progress and always welcome suggestions on how we can be better.



If you have any questions or remarks regarding this manifesto, we invite you to contact us.



Avantium NV
P.O. Box 2915
1000 CX Amsterdam
The Netherlands

+31 20 586 8080
sustainability@avantium.com
www.avantium.com

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