Avantium

Investor Relations toolkit

Last update: 30 September 2025

IR toolkit | getting up-to-speed with the investment case

- This IR toolkit provides a collection of previously published slides, data and references to resources in order to get up-to-speed with the Avantium investment case.

- This IR toolkit may be a useful source for both investors that are new to Avantium and investors and shareholders already familiar with Avantium.

- This IR toolkit is periodically being updated.

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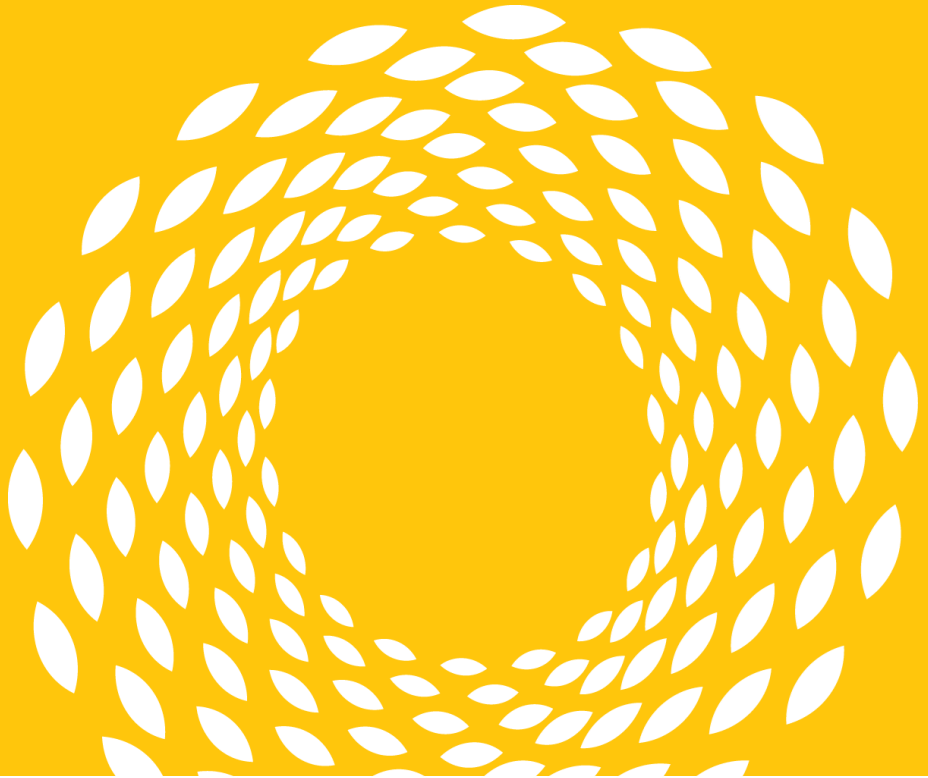
1. Key investment highlights, financial reporting and analyst coverage



Avantium key investment highlights

Avantium is a leading renewable chemistry technology developer specialized in bio-based polymers.

Through its core technology YXY®, the company introduces a better and cleaner monomer and polymer, FDCA and PEF (known under the brand name Releaf®), to the market, addressing a €200B+ market (e.g., packaging, fibers, films, molding, etc.).

- World's first FDCA Flagship Plant, including secured offtake agreements
- Scalable asset-light licensing model
- Innovative technologies and CO_2 utilization
- Proven R&D Solutions business
- ESG-Centric business strategy

Financial Reporting

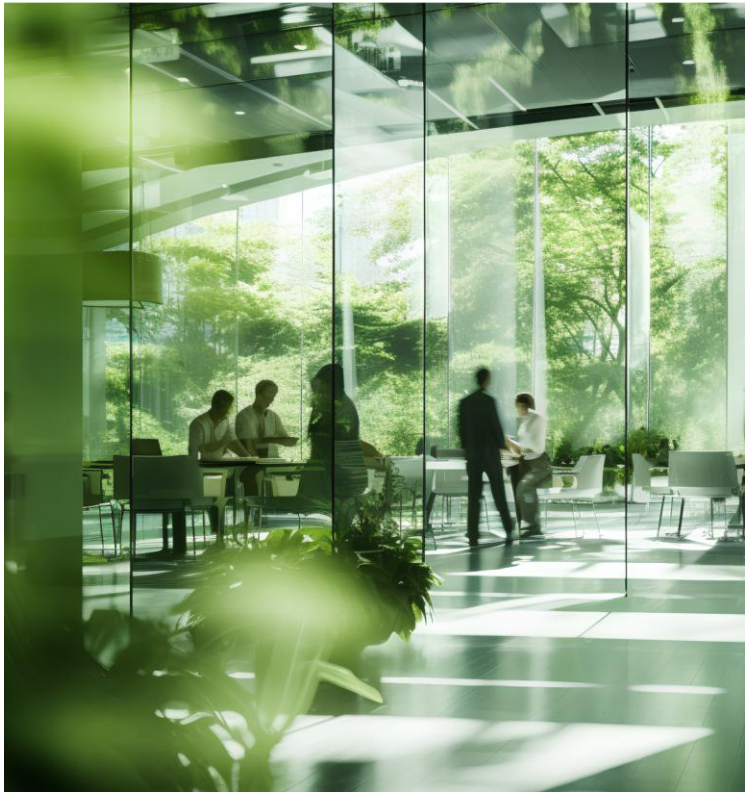
Full Year 2024 Results materials:

- Press release
- Presentation
- Analyst call transcript
- Annual Report 2024

Half Year 2025 Results materials:

- Press release
- Presentation
- Analyst call transcript
- Condensed Consolidated Interim Financials Statement

For more historical financial results information visit:
https://avantium.com/financial-performance-annual-reports/



Analyst coverage

Sell-side analysts currently covering Avantium:

Bank	Recommendation	Target Price	Analyst
ABN Amro - Oddo BHF	Outperform	€9.20	Usama Tariq
Berenberg	Buy	€17.00	Andrés Castanos-Mollor
STIFEL	Buy	€49.00	Paul de Froment
Degroof Petercam	Buy	€14.00	Fernand de Boer
ING	Buy	€95.70	Reg Watson
Kepler Cheuvreux	Hold	€13.50	Patrick Roquas

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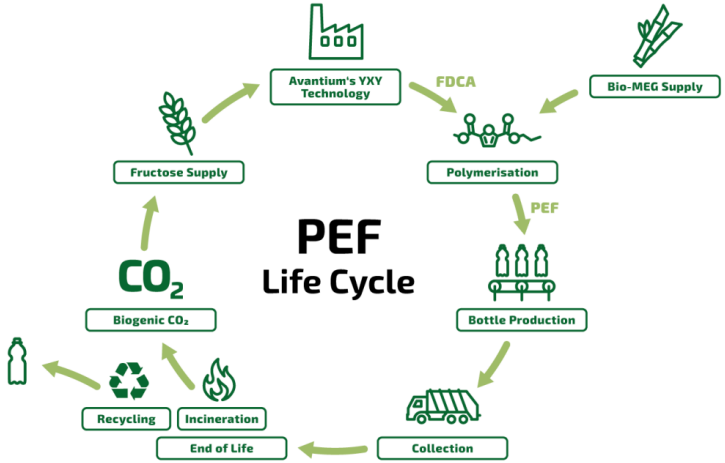
2. Sustainability, impact and GRI

Understanding the sustainability benefits

Life Cycle Assessment (LCA) is fundamental to understanding how Avantium's technologies compete with fossil-based alternatives, as well as the potential sustainability benefits of our technologies.

LCA is the most recognised method to quantitatively assess potential environmental impacts of products, services or processes.

Third-party peer-reviewed and ISO-certified Life Cycle Assessments show that Avantium's PEF can enable a 73% reduction in GHG emissions over the life cycle of a 500 ml PET bottle.



- Source: releaf® (PEF) LCA Applications 500ml bottle (2024)

For more information visit: https://avantium.com/products-technologies/lca/

ESG and GRI

Avantium's Annual Report follows the Global Reporting Initiative (GRI) Standards, ensuring full transparency and accountability. The report covers:

- General Disclosures: Information on our organizational profile, strategy, ethics, and integrity.
- Material Topics: Our identified significant economic, environmental, and social impacts.
- Economic Performance: Financial implications, market presence, and economic impacts.
- Environmental and Social Impact: Our contributions to sustainability, covering areas such as energy, water, emissions, and social responsibility.

A comprehensive GRI index can be found here: https://avantium.com/sustainability/reporting-and-governance/#section-number-5

ESG ratings

Avantium was awarded a Gold Medal by EcoVadis, after a thorough audit of our performance in four categories: environment, labor and human rights, ethics, and sustainable procurement.

Sustainalytics recognized Avantium as having medium risk for material financial impacts driven by ESG factors.

3. Investor Presentation

Selection of previously published slides

Avantium at a glance

Key pillars and investments highlights

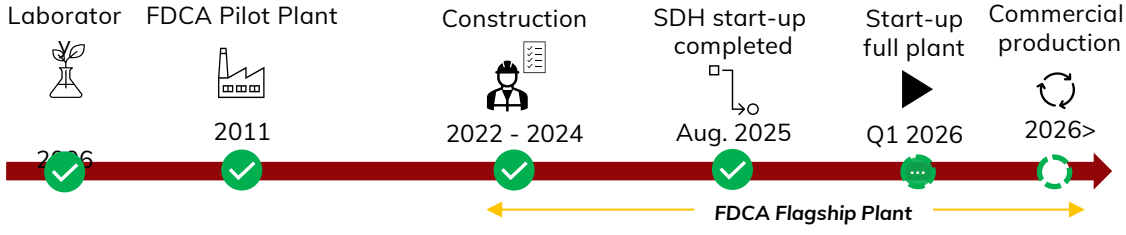
Introducing a better & cleaner monomer and polymer: FDCA and PEF

Finalized construction & anticipates sales under the offtake agreements in Q1 2026

Successfully paving the way towards future licenses

From sugars to the next generation polymer

FDCA / PEF
- ✓ 100% bio-based feedstock
- ✓ Fully recyclable in PET stream
- ✓ Lower carbon footprint
- ✓ With superior properties



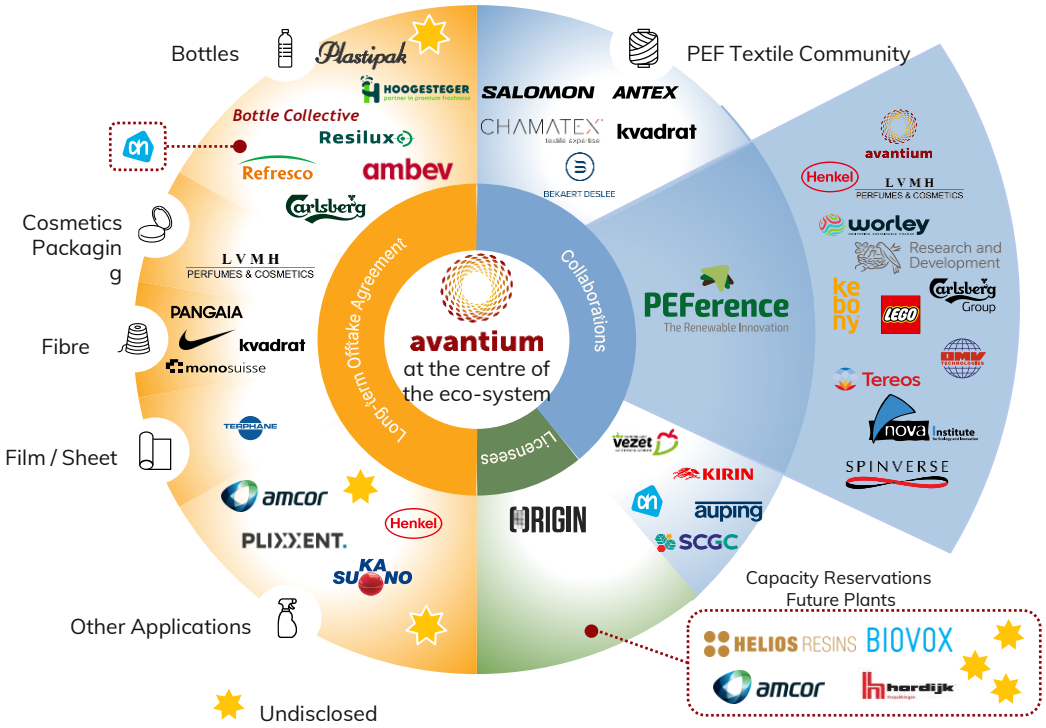
releaf Made by Avantium

20 offtake agreements

7 capacity reservations for future plants

1 license agreement signed

Commitments from leading brands



20
Offtake Agreements

7
Capacity Reservations Future Plants

1
Technology License Agreement

Marit van Egmond
Former CEO of
Albert Heijn

"Besides packaging reduction, recyclability and reuse, fossil-free materials are high on our wish list. With the use of PEF, we are giving substance to this."

Simon Boas Hoffmeyer
Senior Sustainability Director at
Carlsberg

"The things that lured us into looking at PEF are the quality properties, and that PEF is able to retain the fizz of the beer 8 times better than PET."

Anders Byriel
CEO
at
kvadrat

"We have been positively surprised about the properties of PEF, the look and feel [of the textile] is impressive."

What drives us?

The why

CURRENT FOSSIL, LINEAR ECONOMY

- × Atmosphere: CO_2 Climate change
- × Environment: Pollution & Microplastics
- × Human body: Microplastics & Health effects

BARRIERS FOR TRANSITION

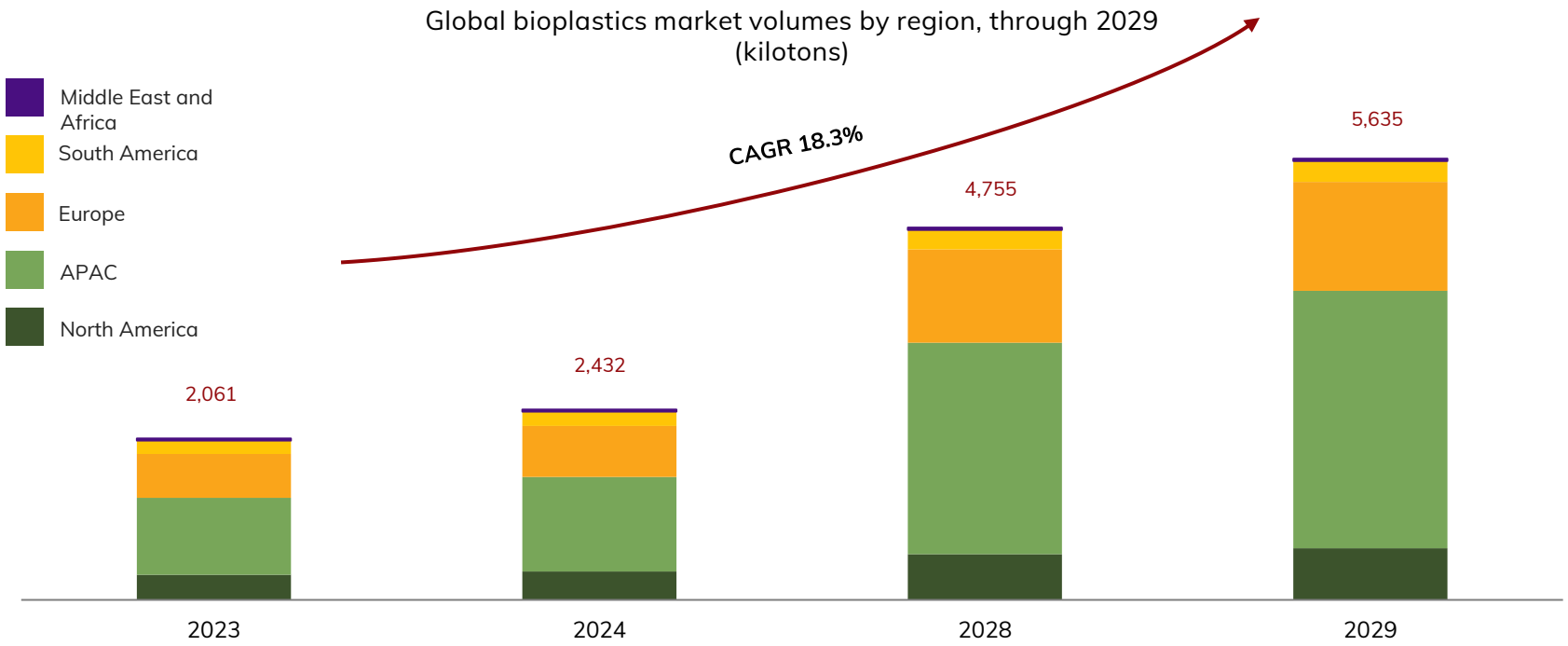
- Inadequate recycling solutions
- Insufficient performance of bioplastic
- Economic barriers (virgin plastic)
- Economic interests: increasingly more oil is used for plastics production

RENEWABLE, CIRCULAR ECONOMY

- ✓ Atmosphere: Oil-independent & lower CO_2 emissions
- ✓ Environment: Not persistent & fits with existing recycling infrastructures
- ✓ Human body: Safe & no migration to human body

Opportunities	
	❖ Strong market demand driven by consumers
	❖ Shifting regulatory landscape favoring biobased materials
	❖ Innovative materials delivering advantages beyond what fossil-based plastics can offer

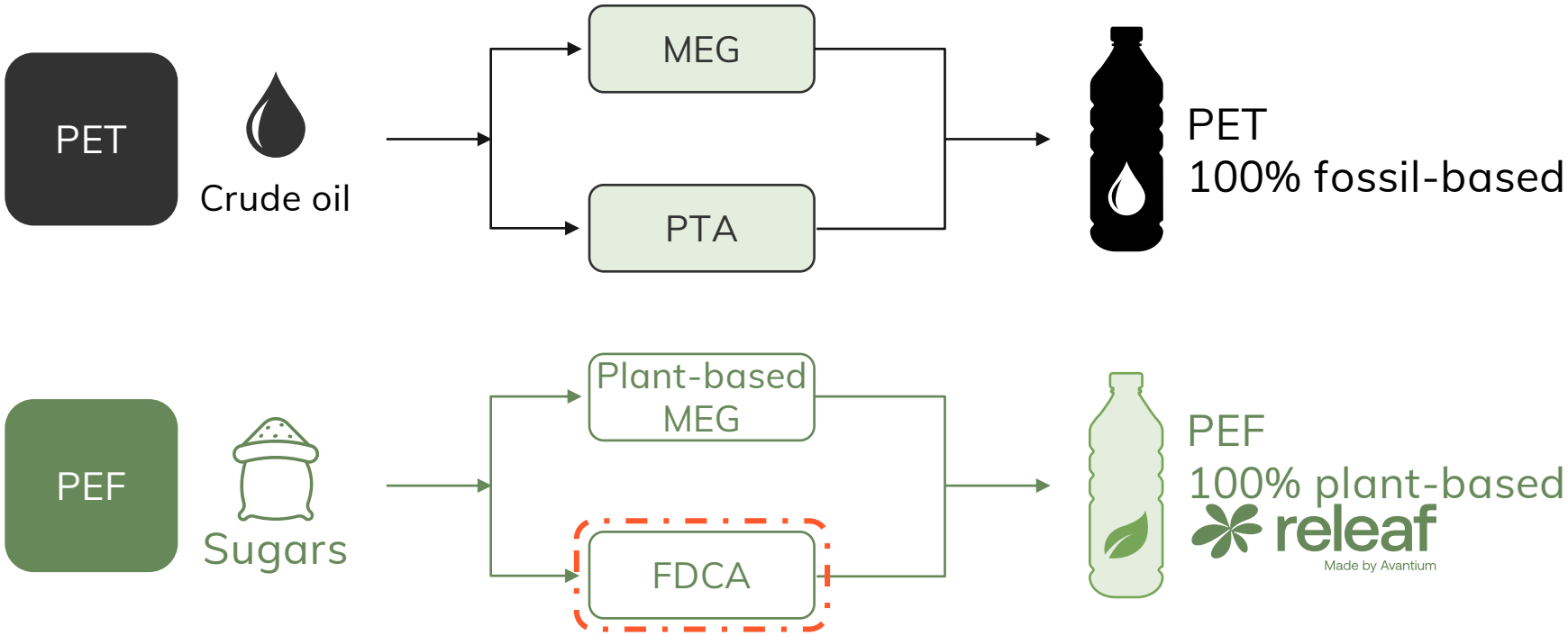
Promising market outlook for bioplastics



Source: BCC Research, "Global Bioplastics Market: Trends, Growth, and Future Outlook", March 2025

FDCA / PEF: Superior performance and sustainability benefits

FDCA: the key building block of PEF



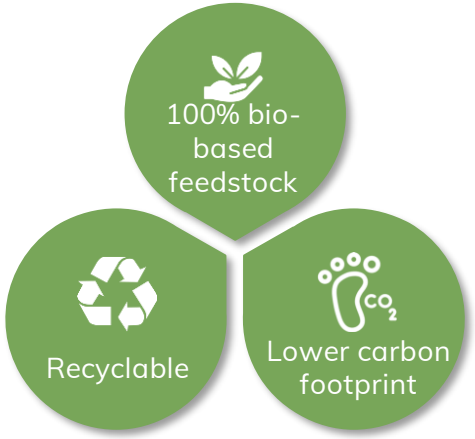
PEF can be used in a very broad range of applications

Key applications	Competing materials	Addressable market[1]	Avantium's partners
Bottles 	Beer, Juices, Waters, Soft Drinks	Glass, Aluminium, PET, Multi-layer	>50 million ton/year >€100bn TAM	Carlsberg Group, AB InBev, Refresco, Resilux, UNDISCLOSED, Logoplaste, Plastipak, HOOGESTEGER
Fibers 	Textile, Upholstery, Car Tires, Industrial Fibers	PET, Nylon, Cotton	>40 million ton/year >€80bn TAM	PANGAIA, kvadrat, monosuisse
Packaging & More 	Food Packaging, Non-Food Packaging	Glass, Aluminium, PET, Multi-layer	>25 million ton/year >€50bn TAM	KA SUONO, Henkel, LVMH, vezet, ORIGIN, HELIOS, Christian Dior PARFUMS, TERPHANE, UNDISCLOSED, TOYOBO, amcor

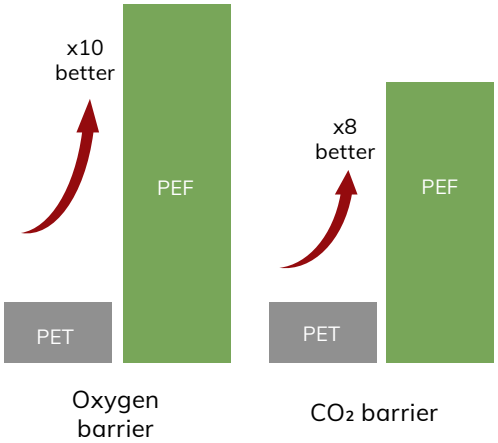
Notes: (1) estimated volume reflects Total Addressable Market (TAM) in 2035 with PEF at 2€/kg
Sources: Smithers, *The future of high barrier packaging films to 2024*, 2021; Smithers, *The future of global flexible packaging to 2026*, 2021; Smithers, *The future of rigid plastic packaging to 2026*, 2021; Thermoformed Packaging Market to 2025, 2018 ; PCI Wood Mackenzie, *Abstract report global Multilayer PET bottles industry to 2024*, 2016 ; Allied Market Research

PEF sustainable and superior alternative for PET

A more sustainable product...



...with superior properties...



...providing distinctive value proposition

>20% weight reduction
as less material required for same properties

Longer shelf life
leading to food waste reduction

Larger range of applications
Ability to replace glass, aluminium, etc.

Enhanced recyclability
as mono-material packaging or by replacing hard-to-recycle polymers (e.g. *nylon*) in multi-material packaging

- *APR[2] Critical Guidance Recognition on compatibility with standard PET recycling practices*
- *RecyClass validates Avantium's PET/PEF bottle as fully recyclable in PET stream*
- *EPBP [1] interim approval on multilayer PET/PEF and monolayer PEF bottles in the PET recycling stream*

Notes: (1) The European PET Bottle Platform is a voluntary initiative of industry organisations representing waste collectors, plastic recyclers, PET material producers and brand owners; (2) The Association of Plastic Recyclers, non-profit organisation focused exclusively on improving recycling for plastics
Sources: Avantium and Nova Institute, *PEF – A Sustainable Packaging Material for Bottles - ISO Certified LCA of Avantium's PEF products*, 2022; University of Aberdeen, *PEF plastic synthesised from industrial carbon dioxide and biowaste*, 2020; Journal of Ecological Engineering, *Energy Inputs on the Production of Plastic Products*, 2022; RECORD, *Chemical and physico-chemical recycling of plastic waste*, 2022, 177 p, n°21-0919/1A; Avantium, *The Journey of Avantium's PEF towards Commercialisation*, 2021

PEF outperforms other sustainable polymers

Key features for a viable sustainable polymer

PEF combines all characteristics of a high-performance sustainable polymer

1. **Renewable feedstock**
   Bio-based polymers reduce GHG emissions
2. **Performance**
   High gas barrier extends shelf life and unlocks mono-material packaging
3. **End-of-life**
   Recyclability through existing infrastructure

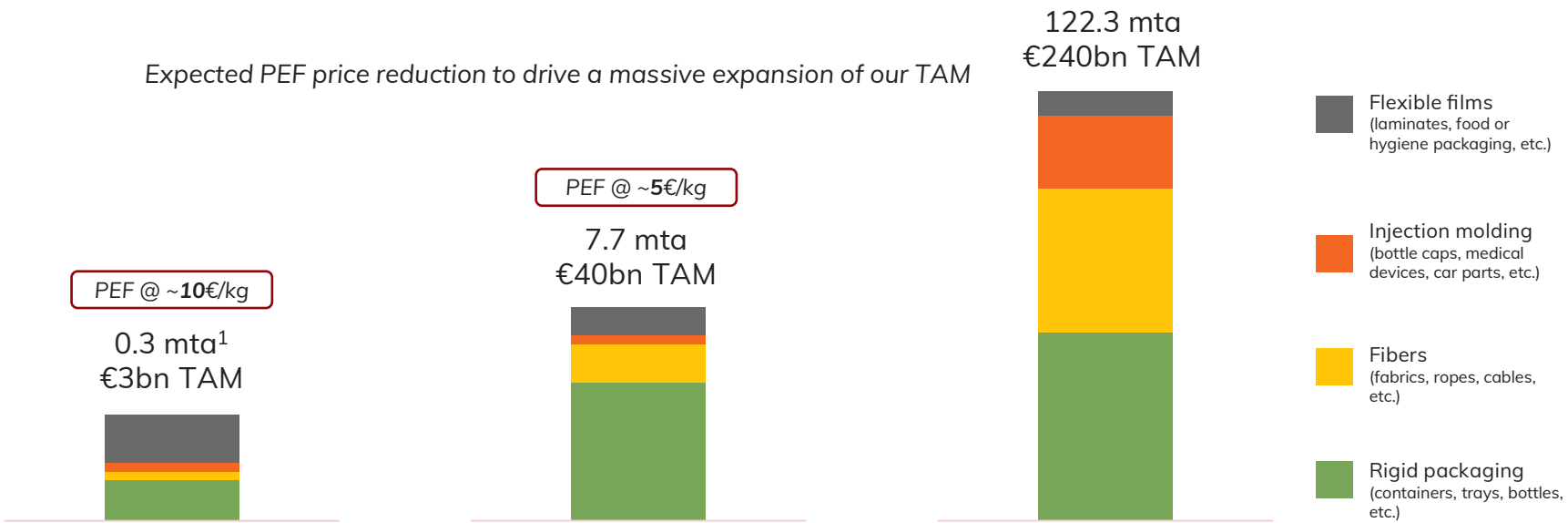
   Degradability in industrial & natural environment

Sustainable polymers side-by-side

	PEF	rPET	bioPET	PBS	PHA	PLA
	✓ Bio-based	✗ Fossil-based	✗ 70% fossil-based	✓ Bio-based	✓ Bio-based	✓ Bio-based
	✓ High gas barrier	✓ Medium gas barrier	✓ Medium gas barrier	✗ Low gas barrier	✗ Low gas barrier	✗ Low gas barrier
	✓ High recyclability (mono & multi-material)	✓ High recyclability (mono-material)	✓ High recyclability (mono-material)	✗ Low recyclability	✗ Low recyclability	✗ Low recyclability
	✓ Medium-Low degradability	✗ Very Low degradability	✗ Very Low degradability	✓ High degradability	✓ High degradability	✓ Medium degradability

PEF addressable market potential

Expected PEF price reduction to drive a massive expansion of our TAM



Own production (5kta)
Distinctive value proposition for multi-layer bottles and EVOH films replacement

Initial licensing phase (100kta)
Clear focus on monolayer bottle, specialty fibers, glass & aluminium replacement, films and multi-layer bottles markets

Large scale licensing (250kta)
Expectation to unlock PET market including large fiber market

Notes: (1) Million Metric Tons Annually, chart is not to scale
Sources: Smithers, *The future of high barrier packaging films to 2024*, 2021; Smithers, *The future of global flexible packaging to 2026*, 2021; Smithers, *The future of rigid plastic packaging to 2026*, 2021; Thermoformed Packaging Market to 2025, 2018 ; PCI Wood Mackenzie, *Abstract report global Multilayer PET bottles industry to 2024*, 2016 ; Allied Market Research

PEF is both sustainable and price-competitive at scale

100kta

Competing with aluminium and glass at €5.0/kg PEF

PEF Bottle
33cl – 13.5g
PEF material cost[1]
€0.07 = ~7% of end price

Glass Bottle
33cl – 200g
Glass material cost[1]
€0.13 = ~13% of end price

Aluminium Can
33cl – 13g
Alu material cost[1]
€0.03 = ~4% of end price

PEF reducing Global Warming Potential ↓ **76%** ***vs. glass*** ↓ **67%** ***vs. aluminium***

250kta

Competing with mono-material PET at €2.5/kg PEF

PEF Bottle
50cl – 17.5g
PEF material cost[2]
€0.044 = ~3.7% of end price

rPET Bottle
50cl – 22g
rPET material cost[2]
€0.055 = ~4.6% of end price

PET Bottle
50cl – 22g
PET material cost[2]
€0.037 = ~3.1% of end price

↓ **73%** ***vs. PET***

Only a c. 85% recycled content PET bottle can equal PEF bottle carbon footprint

Notes: (1) a 33cl bottle made with PEF at €5.0/kg sold at €1.00, a 33cl glass bottle sold at €1.00 and a 33cl aluminium can sold at €0.67; (2) Assuming PEF at €2.5/kg, rPET at €2.5/kg and PET at €1.7/kg, and a 50cl sold at €1.20.
Sources: enzymatic rPET, Company's estimates; Glass, Food grade rPET & PET prices, BusinessAnalytIQ.com, PEF World Congress - bioplastics MAGAZINE(2024), 20241030-PEF-World-Congress-presentation-Nova-Institute-LCA-PEF.pdf, Aluminium International (33 cl), Aluminium Beverage Can Study - International Aluminium Institute

FDCA Flagship Plant

FDCA Flagship Plant start-up status

FDCA Flagship Plant

- First-of-a-kind plant
- Proving technology at 5kta scale
- Team of 70 people
- Located in Delfzijl, The Netherlands
- Critical for a successful licensing strategy

Laboratory — 2006

FDCA Pilot Plant — 2011

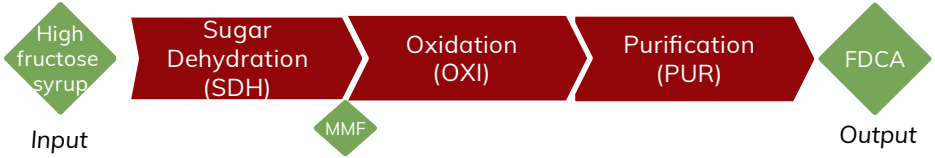
First piling — 2022

Construction completed — 2024

Start-up — 2025 – Q1 2026

Commercial production — 2026>

Core processes



Commissioning & Start-Up status

- ✓ Utilities — Started-up
- ✓ Sugar Dehydration — Started-up
- Oxidation — Start-up ongoing
- Purification — Start-up ongoing

Planned completion of start-up : Q1 2026

Commercializing releaf®

Releaf® | The next generation polymer, with superior performance benefits[1]

Superb barrier properties

10x
better
oxygen barrier

Circular, enhanced recyclability, 100% plant-based

73%
GHG emissions reduction

8x
better
CO_2 barrier

Food waste reduction:
Up to 5-6 times longer shelf life

>20%
weight reduction

Note: (1) Compared to PET

Optimizing licensing strategy through the supply chain

Flagship Plant construction — 2024

Potential new license agreements — 2026 >

Feedstock

Mitigating feedstock risk through 1st and 2nd gen strategy

Commercial

Capacity reservations for future license plants

BIOVOX · HELIOS RESINS · amcor · heradijk

Technology

Mitigating technology risk through FDCA Flagship Plant

Current licensing pipeline

- 70 potential targets
- 21 short-term prospects
- 10 active discussions with potential licensees

Global FDCA licensing opportunities for Avantium

Technology licensing target customers – On a standalone or consortium basis

	Feedstock suppliers	Chemical companies	PET (/polymer) producers
Customer type			
Activity	Process agricultural raw materials (corn, sugar beets, wheat) to produce sugar and starch	Produce basic units of monomers (MEG, PTA, FDCA)	Combine basic units of monomers (MEG, PTA, FDCA) together to form long-chain polymers (PEF, PET)
Illustrative companies	Tereos, cosan, Cargill, MITR PHOL GROUP, SÜDZUCKER	INDORAMA, ORIGIN, SK, SCG, 圣泉集团 SQ GROUP, lyondellbasell, BASF The Chemical Company, INEOS, sinochem	INDORAMA, novaTEX, INEOS, Reliance Industries Limited, Hanwha, ORIGIN, KOLON INDUSTRIES, alpek, MITSUBISHI GAS CHEMICAL, Samyang Foods
Rationale for licensing	Interested in expanding their value chain	Meet their 2030 CO_2 reduction goals by portfolio expansion	Moving from PET to PEF production using existing assets for a greener value and superior performance proposition

Key considerations on licensing

- Proximity to feedstock
- Proximity to existing production infrastructure (brownfield)
- Local market proximity & size
- Local regulations & incentives

Our ambition

4 licenses in place by end of 2027

FDCA – feedstock agnostic, utilising Gen 1 and 2 feedstocks

Suppliers

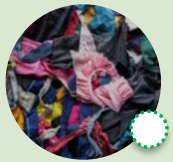
1st Generation feedstock

Glucose/fructose from starch

- FDCA Flagship Plant is using Gen 1 feedstock: starch – an abundant co-product
- Regionally & commercially available
- Sugar surplus, no competition with food supply

2nd Generation feedstock innovations

Wood chips



Textile waste

- Feedstock availability crucial for effective global licensing strategy
- Avantium's Dawn Technology develops strategic diversifying feedstock options
- Recent breakthrough polycotton textile waste recycling

Offtakers

Feedstock suppliers are also potential licensing targets *(illustrative)*

Cargill · Tereos · SÜDZUCKER · MITR PHOL GROUP · cosan

2nd generation feedstock: Dawn/Yukon technology enabling to use polycotton textile waste for feedstock

The technology

- Avantium *(together with the University of Amsterdam)* developed a patented technology to break down cotton in polycotton textile waste into an intermediate for ***FDCA/PEF (based on 2G feedstock)***, while leaving the polyester intact for fiber-to-fiber recycling

Textile waste management

- Addressing global waste problem
  149m tons of expected textile production by 2030
  < 1% - current recycling rate[1]
- Avantium's technology aligns with new regulations that make textile producers responsible for waste management

Business case

- Scalable and cost competitive: successful Avantium Dawn pilot plant tests demonstrate high yields from polycotton waste, proving the method's scalability and cost-effectiveness

Polyester residue of postconsumer polycotton waste textiles in the DAWN pilot plant

Strategic importance

- Feedstock agnostic approach: reinforces the commercial potential of FDCA / PEF, supports Avantium's licensing strategy

Note: (1) Pepper, L. R. & Truscott, L. Preferred Fiber & Materials Market Report 2022, Ellen MacArthur Foundation. A New Textiles Economy: Redesigning Fashion s Future; Ellen MacArthur Foundation: Cowes, UK, 2017

Key takeaways

1	Most advanced FDCA & PEF player worldwide	Most advanced technology, strong IP portfolio, global leader in the commercialization of FDCA/PEF
2	FDCA Flagship Plant start-up	Successfully started up the utilities and Sugar Dehydration (SDH) unit. Oxidation unit and Purification unit start-up underway
3	Strong commercial momentum	i. Commercial scale FDCA production start-up in Q1 2026 ii. 20 Contracted offtakes by industry leaders iii. 7 Capacity reservations for future plants iv. Pro-active licensing strategy; 1 license agreement in place
4	Comprehensive financing package	As part of a comprehensive financing package, raising €65million in equity, with a €15 million cornerstone placement from Dutch Ministry of KGG, to fund completion of start-up of the Flagship Plant, accelerate licensing deployment and expand FDCA/PEF applications
5	Clear path to profitable growth	Ambition: €90 million[1] revenues and EBITDA break-even in 2027

(1) includes revenues from R&D Solutions

Appendix

Glossary

FDCA: Furandicarboxylic Acid

FDME: Furandicarboxylic Methyl Ester

FEED: Front End Engineering Design

FID: Final Investment Decision

HFS: High-Fructose Syrup

JV: Joint-Venture

MEG: Mono-Ethylene Glycol

MF: Methylfurfural

ML: Methyl Levulinate

MTA: Million Metric Tons Annualy

NPV: Net Present Value

PEF: Polyethylene Furanoate

PET: Polyethylene Terephthalate

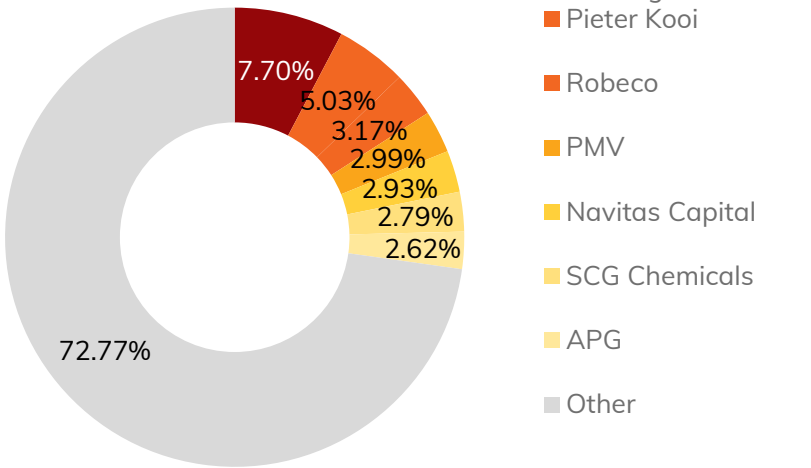
PTA: Purified Terephthalic Acid

RDS: R&D Services

TAM: Total Addressable Market

Capital market snapshot

Shareholding structure[1]

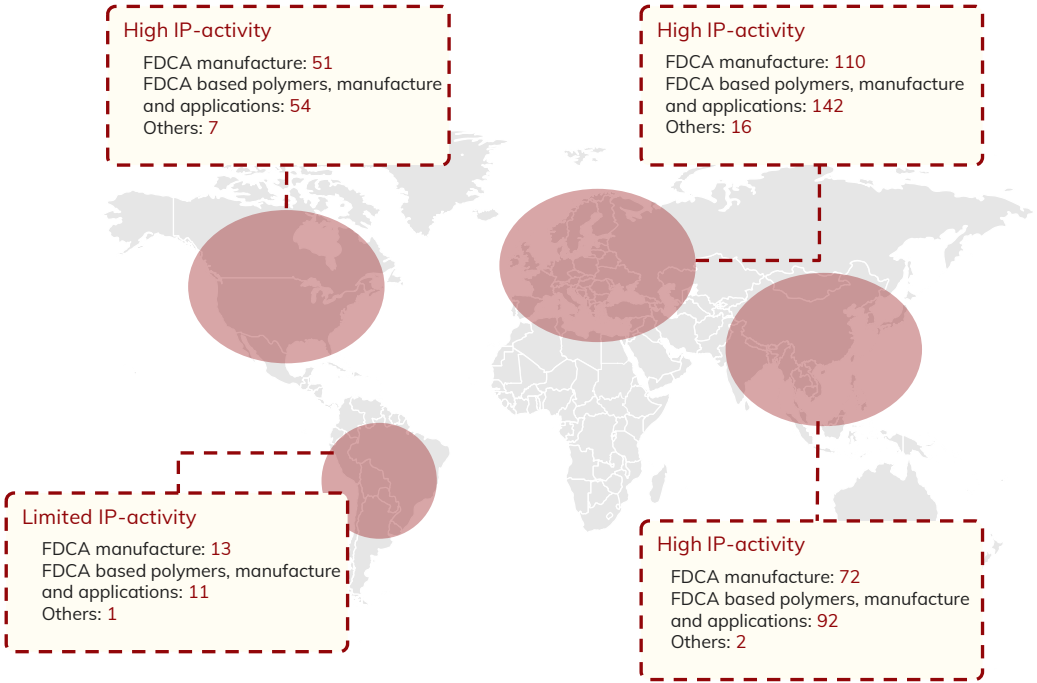


Share Capital[2]

Shares Outstanding	8,802,388
Dilutive instruments[3]	2,147,476
Stock Exchange	▪ Euronext Amsterdam ▪ Euronext Brussels
Ticker	AVTX

Note: (1) as of May 26, 2025 (2) includes shares held by Wierda Vermogensbeheer on behalf of its clients (3) Includes long-term incentive plan shares as per year-end 2024 and warrants issued to lenders; excludes €5 million convertible loan from Pieter Kooi
Sources: AFM; presented shareholdings are based on AFM notifications- actual shareholdings may deviate from presented data

Avantium owns the necessary IP for production and licensing of FDCA and its high value applications



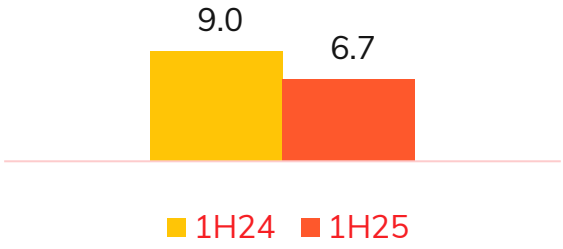
IP across further businesses

- Avantium has 175+ patent families[1] containing 1,125 rights
- Besides FDCA (72 families, 578 rights), Avantium holds the IP required for the execution of its commercial strategy for all other technologies (R&D Solutions, Ray Technology, Volta Technology and Dawn Technology)
- Avantium actively manages its IP portfolio including review of third-party patent positions
- Avantium has a dedicated team of in-house patent attorneys

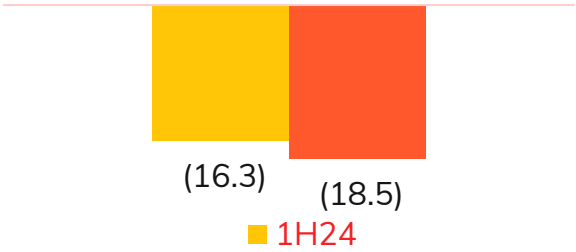
Note: (1) Includes not yet published families while geographic overview excludes these

1H 2025 financial highlights (€ millions)

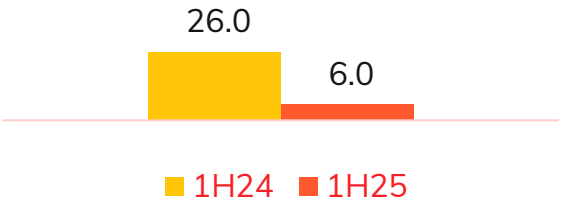
Revenues



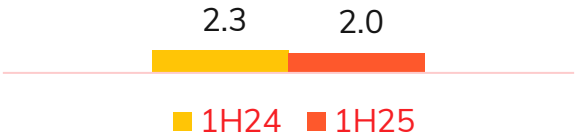
EBITDA



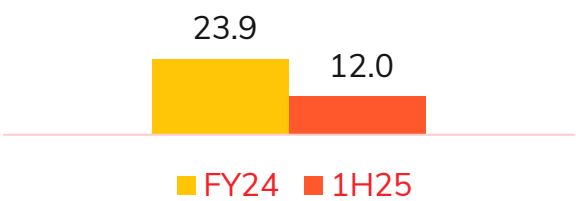
Investments



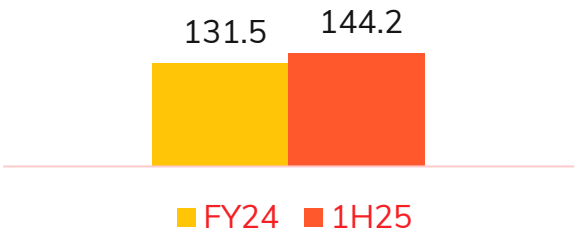
Other income (grants)



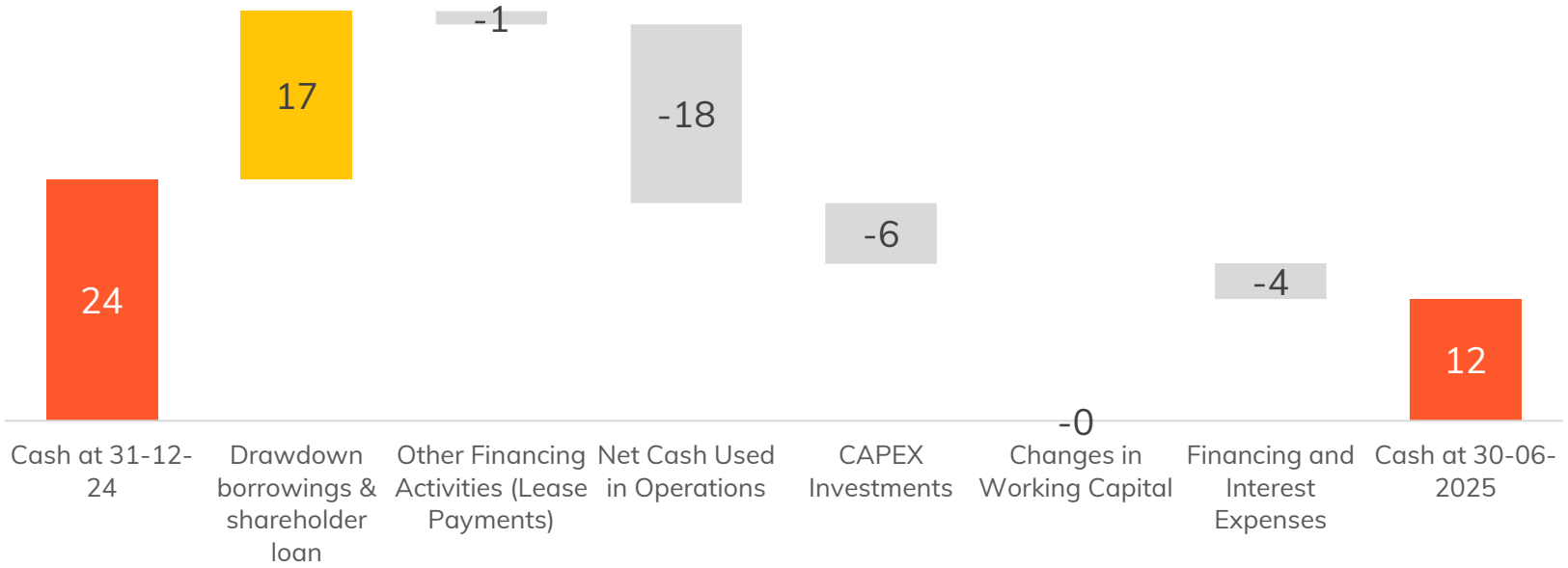
Cash position



Borrowings



1H 2025 cash flows (€ millions)



Broad range of applications







Stricter European regulations increase the need for truly sustainable solutions, requiring short-term investments

Packaging and Packaging Waste Regulation (PPWR): regulates what kind of packaging can be placed on the EU market, as well as packaging waste management and prevention measures

Entered into force on February 11, 2025

- 2030 - packaging full recyclability
- 2040 - 15% reduction in per capita packaging waste
- 2050 - climate neutrality in the packaging sector

Clean Industrial Deal: outlines concrete actions to turn decarbonization into a driver of growth for European industries, including actions for the use of recycled and biobased materials *Presented on February 26, 2025, by European Commission*

2026

Public procurement rules revised to favor sustainable and European products, with €100bn mobilized for clean manufacturing

4. IR contact

Questions about investing in Avantium?
Please don’t hesitate to reach out!

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