

Avantium

General meeting of Shareholders

Amsterdam, 14 June 2017



OPENING

**REPORT OF THE MANAGEMENT BOARD
FOR FINANCIAL YEAR 2016**

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Content

- Company Strategy
- Progress made in 2016
- Financial Results 2016
- Update 2017

Company strategy

Company Strategy

- Objective is to be a leader in the transition of the chemical industry to renewable chemicals and plastics
- By developing breakthrough technologies to make sustainable, biobased products that compete on performance and price
- By commercializing these technologies in partnership with industrial companies and monetizing them through a licensing business model
- Underpinned by Catalysis business to maintain technological leadership in advanced catalysis R&D and through robust financial performance

Company activities

- YXY:
 - Furthest advanced technology to catalytically convert plant-based sugars (fructose) into biobased chemicals, such as FDCA and polymers, such as PEF
- Renewable Chemistries:
 - Development division of Avantium with a portfolio of projects focusing on the conversion of biomass to chemical building blocks and plastic materials
- Catalysis:
 - Providing advanced catalysis R&D services and systems to companies in the chemical, refinery and energy sector

Progress in 2016

Highlights 2016

- We have recorded no safety accidents; safety remains our number 1 priority
- We have formed a Joint-Venture with BASF – incorporated under the name Synvina – for the commercialization of YXY, including the construction and operation of a reference plant for FDCA in Antwerp and licensing of the YXY technology for global deployment
- We have made strong progress in developing the Japanese market by signing a framework agreement with Mitsui and a partnership agreement with Toyobo for the development of PEF thin films for food packaging, electronics and medical applications.
- We have acquired the assets of Liquid Light (Princeton, NJ, USA) for developing a leading electro-catalysis platform for conversion of CO₂ to chemicals
- Steady performance Catalysis business

Avantium structure 2016

Synvina: Joint Venture with BASF

- 100% biobased, recyclable PEF with superior properties
- Major market potential in packaging materials and fibers



Renewable Chemistries

- Zambezi: sugar from non-food biomass
- Mekong: 1-step conversion to bio-MEG
- Volta: CO₂ to chemicals via electrochemistry



Catalysis R&D business

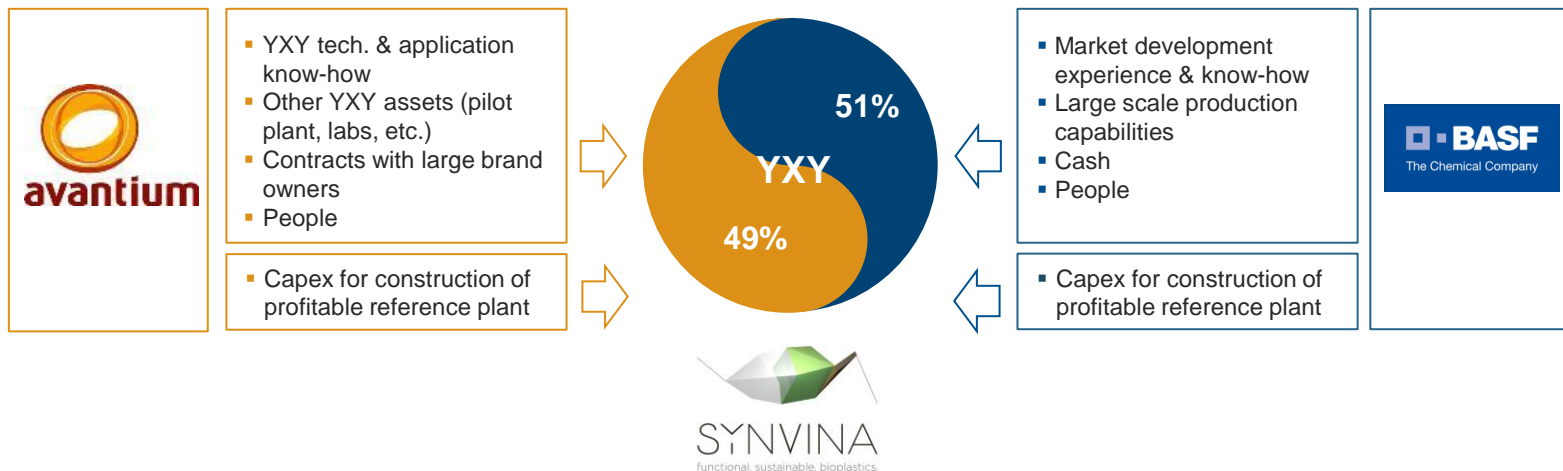
- Leading service and systems provider
- Blue chip clients



YXY: Joint-Venture formed with BASF, to build and operate a commercial scale plant with a production capacity up to 50kta

Strategic rationale

- Accelerate FDCA & PEF market leadership
- Commercialize the YXY technology by licensing to enable global industrial scale production of PEF
- Leverage complementary capabilities to minimize technical and market adoption risk



Day-to-day operations will be run by JV management and all strategic and material events will be decided unanimously

JV with BASF - Main terms and clauses

Accounting

- The participation in the Joint Venture is accounted for using the equity method. No consolidation (49% stake). Reported at net asset value and results of operations will be impacted by the performance of the JV and earn-out payments

Management

- The Joint Venture has two statutory directors, one of which is nominated by BASF and the other by Avantium, as long as Avantium holds an interest in the Joint Venture of at least 25%

Control

- Avantium does not retain complete control over all decisions with respect to the operation and management of the Joint Venture

Supervisory

- Supervisory board of the Joint Venture consists for 50% of members nominated by each of Avantium and BASF and should decide on a basis of majority

Day-to-day operations will be run by JV management and all strategic and material events will be decided unanimously (cont'd)

JV with BASF - Main terms and clauses

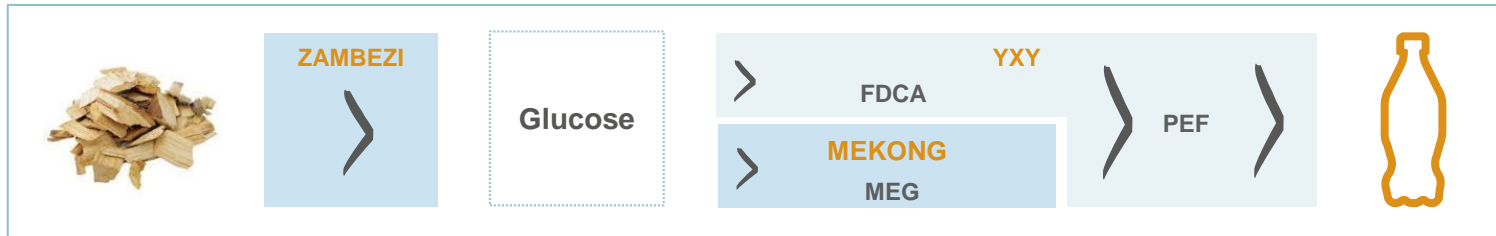
Termination	<ul style="list-style-type: none"> ▪ In case of termination of the JV, the YXY technology will return to Avantium
Minority protection	<p>For the following matters any shareholder with an equity interest > 25% shall have to approve:</p> <ul style="list-style-type: none"> (a) Changes in the JV setup, shareholding, articles of association, sale of assets, mergers, divestitures (b) Making significant investments, granting guarantees, borrowing, lending (all > € 10 M) (c) Transactions with BASF or Avantium not meeting arm's length conditions (d) Decisions on acquiring IP from BASF (e) Changes to the business principles, business strategy and licensing principles (f) Changes to the dividend policy
Change of control	<ul style="list-style-type: none"> ▪ Parties shall have the first right to buy JV shares from the other Party; Parties shall then be free to sell JV shares to a third party, except for 'excluded parties' ▪ BASF has a right to match an offer for a controlling stake in Avantium and a put option for its JV shares in case of an Avantium CoC by an excluded party ▪ Excluded parties include (potential) FDCA producers and major PEF customers

JV with BASF - Distributions from the JV to Avantium

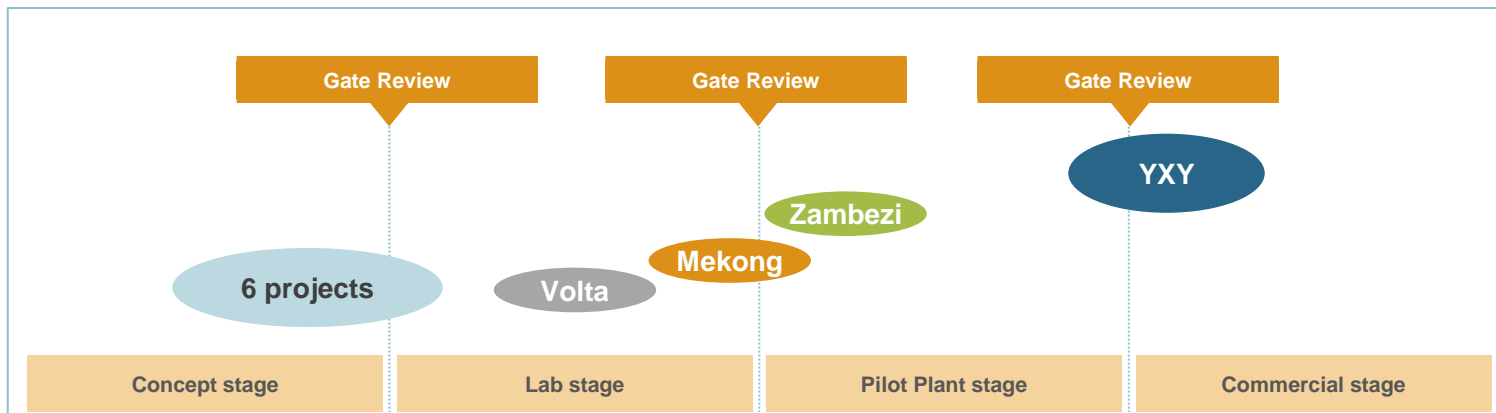
	Description	Comments
<p>Earn-out</p>	<ul style="list-style-type: none"> ▪ 20% of the license income (revenue) until 2035 ▪ If Avantium's stake in the JV is reduced under 40%, the earn-out % will decrease based on a pre-determined schedule ▪ Earn-out payments will be accounted for as revenue by Avantium ▪ Earn-out payments have priority over the dividend payments 	<ul style="list-style-type: none"> ▪ BASF is entitled to a sharp discount on the 1st ever license of the JV within a certain time frame ▪ BASF will also receive a strong discount on its 2nd license ▪ Earn-out payments might be deferred for a maximum of 5 years, if the cash position of the JV does not allow the payment
<p>Dividends</p>	<ul style="list-style-type: none"> ▪ JV will distribute 100% of its net income as dividends to its shareholders 	<ul style="list-style-type: none"> ▪ A dividend or other distribution may only be declared and made unless: <ul style="list-style-type: none"> - not allowed by law - in conflict with any financing obligation of the JV - in conflict with (6 months) liquidity planning of the JV

Renewable Chemistry – developing the next YXys

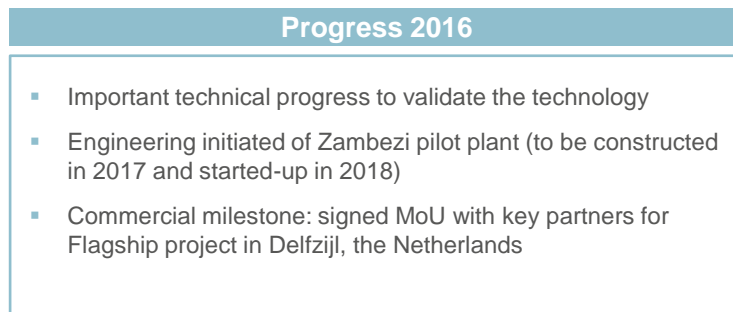
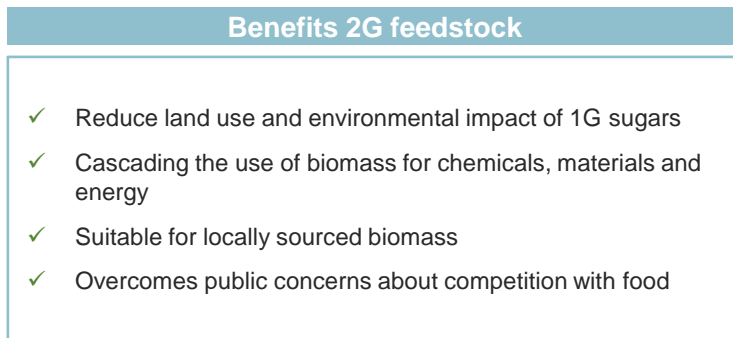
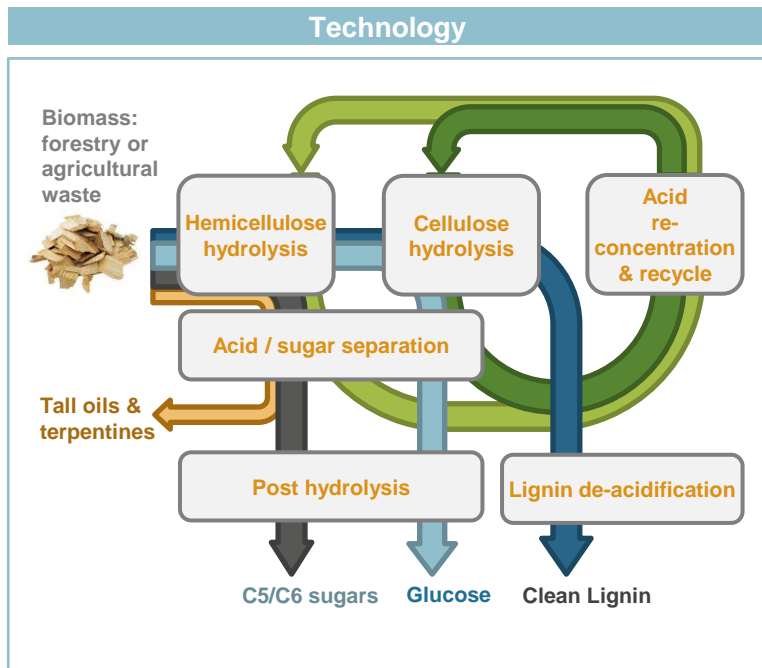
Coherent portfolio, each targeting blockbuster markets



Pursuing the most attractive opportunities through rigorous project management



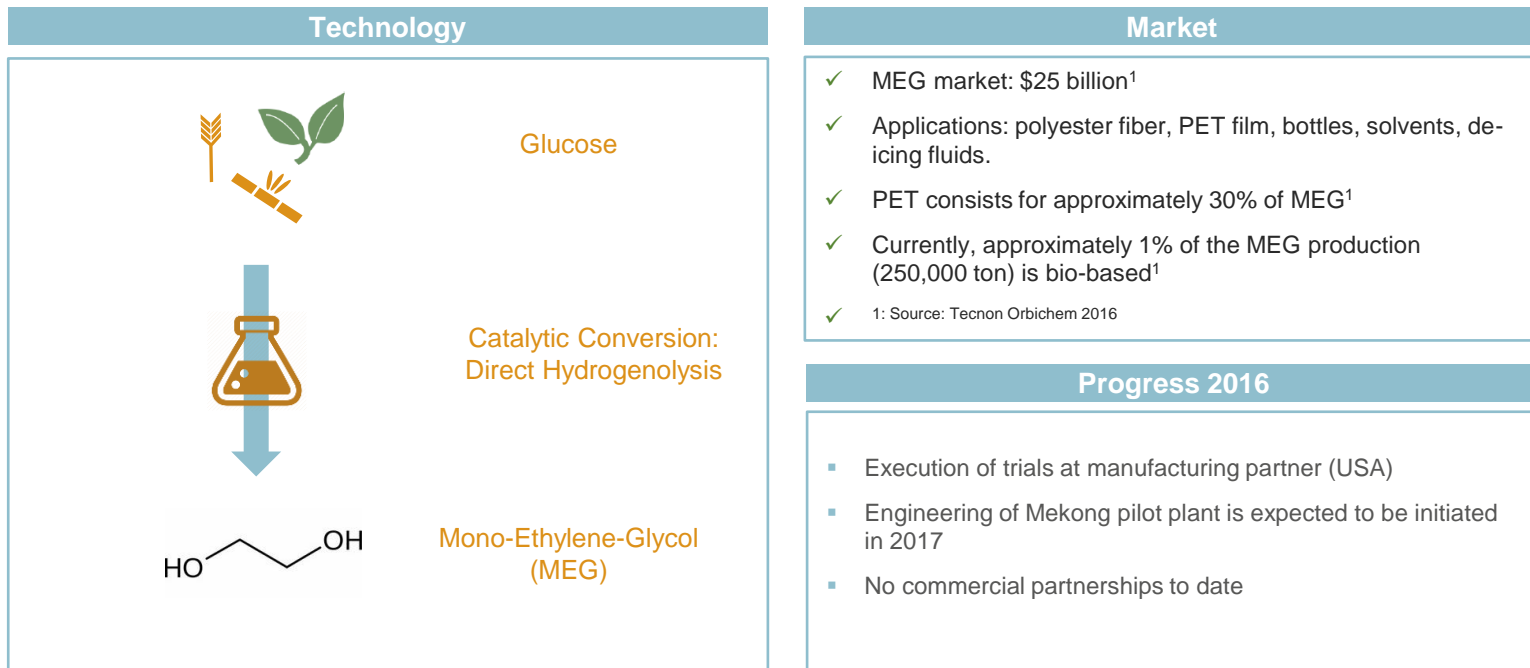
Zambezi – biorefinery process for high purity glucose from non-food biomass



In December 2016, Avantium signed a non-binding memorandum of understanding for a flagship wood-to-chemicals biorefinery



Mekong – catalytic process for making biobased (MEG)



Volta – CO₂ to chemicals via electrochemistry

Opportunity of Electrochemistry

- Renewable electricity is expected to become cheaper and increasingly important in chemical processes
- Electrochemistry can:
 - Improve selectivity
 - Reduce process steps
 - Reduce waste
- To reduce CO₂ emissions by conversion to chemicals

Status and next steps

- Avantium acquired in December 2016 all assets and IP from Liquid Light (US)
- All Liquid Light's assets have been transferred to Avantium's laboratories in Amsterdam
- Improve productivity, by making electrochemical processes competitive with conventional technologies
- Preparing for piloting process

Volta technology



- ✓ Avantium is working on electrochemistry since 2013, funded by €2.3m of subsidy
- ✓ To use electricity directly for purification, oxidation and reduction reactions
- ✓ Electrochemistry to convert CO₂ in chemicals
- ✓ Strong synergy with catalysis

Liquid Light and other parties



- Princeton University spin out. Over US\$ 35 million invested
- Global #3 in number of patents in organic electrochemistry
- #1 in 2014 Biofuels Digest's 40 hottest small companies in the advanced bioeconomy and 2014 Rising Star of the Year in Global Cleantech 100

Catalysis: Cash flow generating business, maintaining technological leadership in advanced catalysis R&D

Flowrence XD

- Launched new Catalyst Testing System for Early-Stage Discovery



Refinery Catalyst Testing

- Expanded testing services to more refining processes.



Strategy Execution

- Introduced high-value technologies to extend our leadership in accuracy, reliability and ease-of-use
- Expanded to new geographic markets
- Increased focus on operational excellence

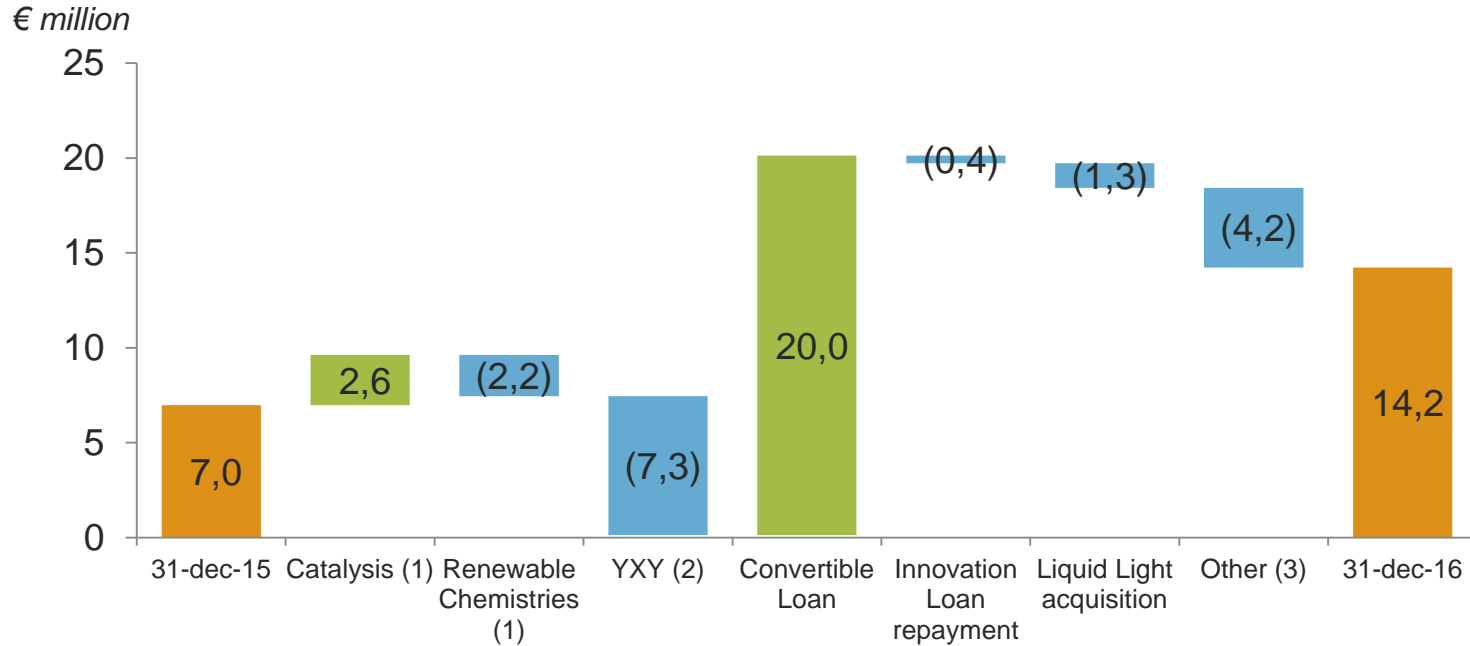
Stable cash flow generating business

2016

- Revenue € 10.2 million
- Adjusted EBITDA € 2.6 million

Financial Results 2016

Cash and cash equivalents



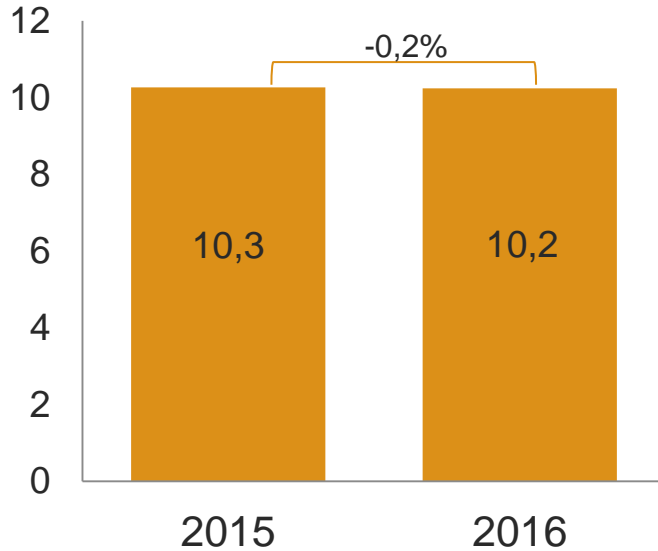
Cash position improved with € 7.2 million

1. Reflects adjusted EBITDA (= operating profit / loss + depreciation & amortization +/- capex)
2. Reflects cash flow from discontinued operations as per consolidated statement of cash flows
3. Includes rent, working capital movements, interest costs, overhead operating and investment costs

Segment information – revenues (excluding YXY)

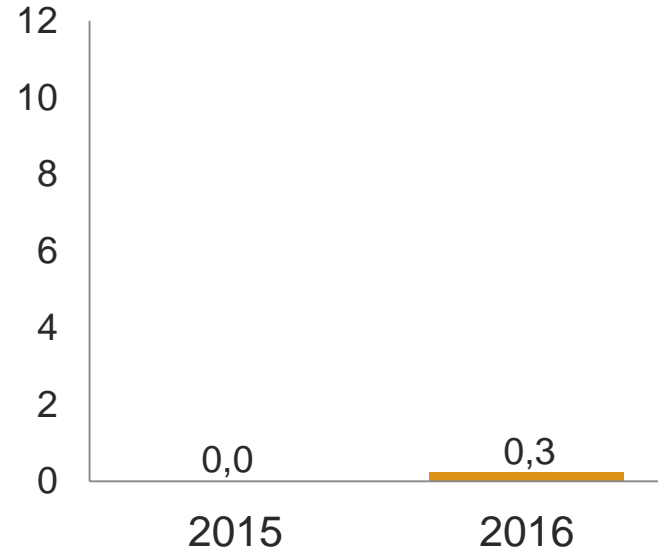
■ Catalysis

€ million



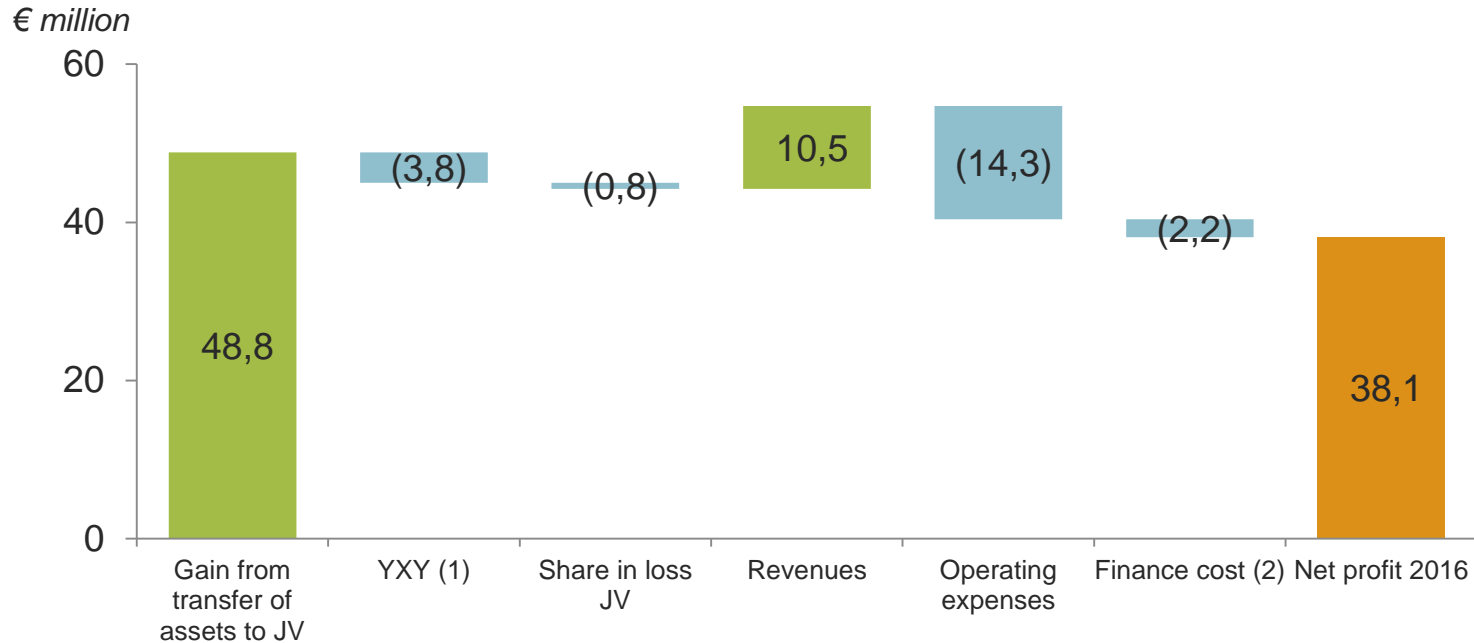
■ Renewable Chemistries

€ million



Catalysis performance in 2016 in line with 2015
Renewable Chemistries income from MoU on project Zambezi

Net Profit for the year 2016



Net profit impacted by one-off gain from JV incorporation (€ 49 million), increased investment in Renewable Chemistries (€ 1.4 million) and non-recurring interest charge on convertible loan (€ 2.2 million)

1. Reflects the loss attributable to discontinued operations, i.e. YXY in 2016 before transfer of operations to JV
2. Reflects the accrued interest costs on convertible loan (1% per month) and on innovation loan facility (6.2% per year)

Update 2017

Events after balance sheet date

- 15 March 2017:
 - Avantium celebrates its Listing on Euronext Amsterdam and Euronext Brussels, raising € 103 million
- 13 April 2017:
 - Avantium announces partial exercise of over-allotment option bringing the gross proceeds of its IPO to € 109 million
- Subsequent movements of share capital:

	Number of ordinary shares	Movement	Outstanding
Share capital - Outstanding 31/12/2016			131,866,499
	Capital restructuring (reverse share split 10:1)	(118,679,853)	
	Shares from CLA conversion	2,704,883	
	Shares issued at IPO after over-allotment	9,872,937	
Share capital – Outstanding to date			25,764,466

Events after balance sheet date (cont'd)

- 24 January 2017:
 - Avantium in Global Cleantech Top 100
- 26 April 2017:
 - Gert-Jan Gruter (CTO) named European Inventor Award 2017 finalist
- 22 May 2017:
 - Synvina receives interim approval from European PET Bottle Platform: PEF to be integrated in circular economy
- 8 June 2017:
 - Avantium appoint Zanna McFerson as Chief Business Development Officer
 - Avantium proudly announces that a BBI subsidy of € 25 million has been granted to the Industry Consortium “PEference”.
- 9 June 2017:
 - Avantium included in Small Cap Index Euronext (AScX) as of 19 June 2017



Thank you for your attention