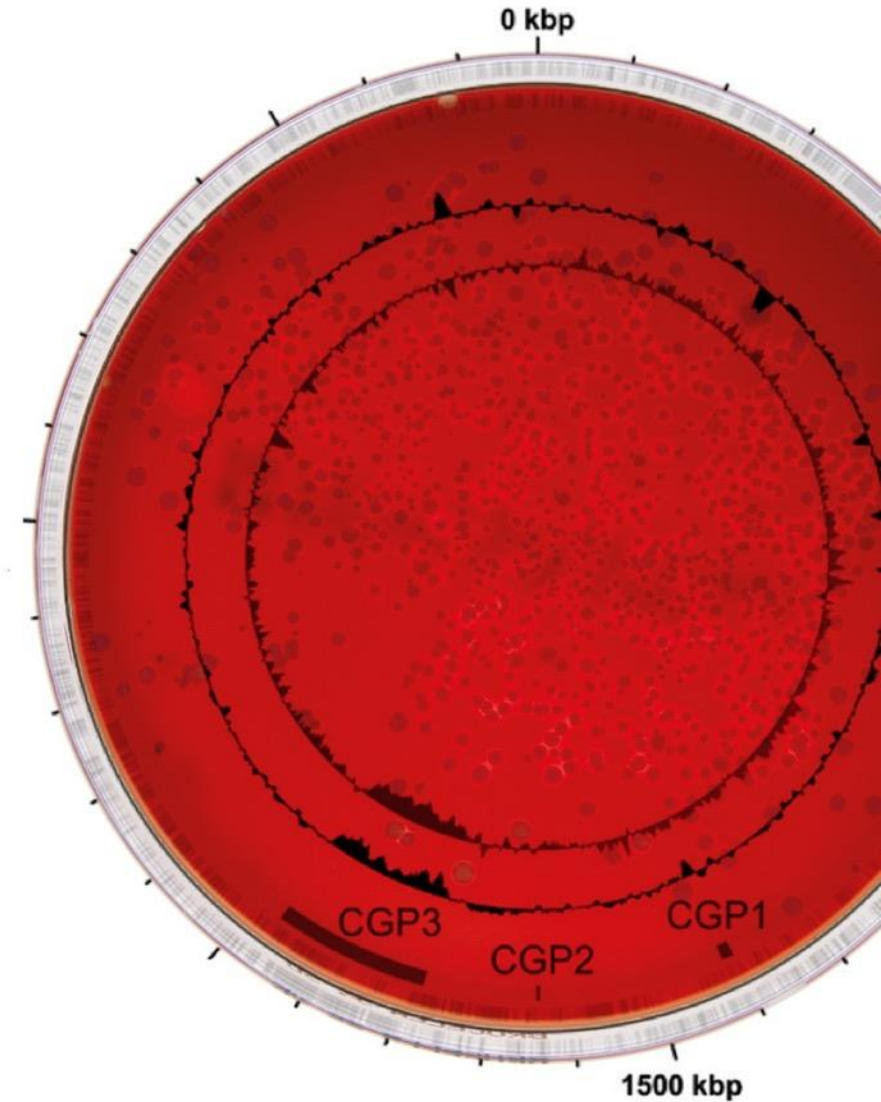


BRAIN

Pioneering Bioproducts

Presentation of 12M Figures FY 2018/19

Zwingenberg, 28. January 2020



Disclaimer

This document may contain forward-looking statements. These forward-looking statements are subject to risks and uncertainties, as they relate to future events and are based on current assumptions of the Company, which may not occur at all in the future or may not occur as assumed. They do not represent a guarantee for future results or performance of the Company, and the development of economic and legal conditions may materially differ from the information expressed or implied in the forward-looking statements.

The Company assumes no obligation to update or revise any forward-looking statement contained herein or to adapt them to future events or developments. The information contained in this document has not been independently verified. No representation or warranty expressed or implied is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information or opinion contained herein. The Company or any of its shareholders, affiliates, advisors, employees or representatives shall have no liability whatsoever (in negligence or otherwise) for any loss arising from any use of this document or its content or otherwise arising in connection with this document.

By accepting this presentation you acknowledge that you will be solely responsible for your own assessment of the market and the market position of the Company and that you will conduct your own analysis and be solely responsibility for forming your own view of the potential future performance of the Company's business.

This presentation speaks as of January 28, 2020. Neither the delivery of this presentation nor any further discussions of the Company with any of the recipients shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since such date. The term "BRAIN", as used in this presentation means B.R.A.I.N. Biotechnology Research and Information Network AG and its affiliates, if not otherwise specified.

Our Ambition

To make **consumer products** more **effective** and **healthy** as well as **industrial processes** more **efficient** and **sustainable**.

Our Mission

- We discover and produce **novel biological ingredients** on the basis of our **proprietary BioArchive**
- We focus on attractive **B2B** markets in **Nutrition & Health, Skin Care** and **Industrial BioSolutions**

Our Commitment

To grow as a **fully integrated bio-specialty company** providing novel bio-based products and efficient processes.



Addressing Global Megatrends

Making products and industrial processes more sustainable.

Bioeconomy drivers



Consumer demands

- Healthier food, no compromise on taste
- Natural ingredients for food, feed, cosmetics
- Eco-friendly and sustainable production



Political demands

- Protection of consumers and environment
- Implementation of UN Sustainable Development Goals



Industry demands

- Natural ingredients and biological solutions
- First-mover advantage, speeding up innovation cycles
- Energy- and resource-efficient processes

BRAIN contributions



Bio-based ingredients

- Access to unique BioArchive collection
- Biological ingredients for food, feed, cosmetics and consumer care products



Game-changing technologies

- Sophisticated screening technologies
- Microbial production strains
- Enzymes and biocatalysts for industry



Disruptive product innovations

- First-in-class products & processes
- Substituting chemistry by bio products
- Growing product-based business

Key facts about BRAIN

Leader in BioEconomy

- Founded 1993
- >300 staff employed
- Since 2016 listed at Prime Standard Frankfurt Stock Exchange

Unique selling propositions

- Comprehensive proprietary BioArchive of natural solutions (Result of >450 man years)
- Unique combination of technological expertise and BioArchive (strong international IP position)
- Successful track-record (>100 industrial partnerships)

Growth opportunities

- Further growth with improved own product business
- Pipeline of own product candidates
- Ongoing internationalization of business
- M&A track-record and integration expertise

>26

years of experience

>300

staff employees (5 subsidiaries)

>100

specialty B2B products in our portfolio

>100

industrial partnerships

12

New product development programs for the growing Nutrition & Health, Skin Care and BioSolutions markets













Track-record of industry partnerships

More than 100 exclusive partner collaborations successfully completed.



*confidential partnerships not disclosed

Selected Examples of 'BRAIN inside'

	 Customized Enzymes	 High-Performance Microorganisms	 BioActive Natural Compounds	
Product Range			  	
BRAIN Inside	Low temperature detergent enzymes	Flavorpro™ 786P Flavor creation in cheese processing	Optimisation of microbial strain for Isomalt production	Skin anti-irritant Symsitive 1609
Industrial partner	 #3 detergent business globally	 BRAIN subsidiary	 #1 European sugar company	 #4 ingredients supplier globally

What we Are Really Good at



Industry leading BioArchive

Huge proprietary collection of Microorganisms, Enzymes and Natural Compounds including compounds from edible biomaterials

53,000

Characterized
Microorganisms

13,000

Plant fractions
available for isolation
campaigns

43

Metagenome libraries

450

Habitat collections
and environmental
samples

11,700

Samples derived from
edible biomaterials

231

Giga-bp DNA ready
to screen

464

Gene libraries
available for
screening

49,500

Natural and naturally
inspired compounds

300 mn

Reusable ready-to-
screen Metagenome
clones



Intellectual property and scientific creativity

>160

Employees in R&D

Strong IP Position

International IP rights
for technology &
product innovations

>100

Own products on
the market



World class technology portfolio and R&D expertise

Solution focused mindset overcoming limitations of a single technology approach.



BioArchive

- Industry leading collection of bio-based resources
- Selection libraries



Candidate Discovery

- *In silico* and activity based screening
- High-throughput Compound Extraction and Isolation
- Structure Elucidation
- Sample Provision



Data Evaluation

- Analytics
- Bioinformatics
- NGS sequencing



Optimization Engineering

- Microbial Expression
- Microbial Strain Development
- Gene and Protein Engineering



Production Scale-up

- Process Development
- Process Optimization
- Product Blending & Formulation

MetXtra™

MEGx

ABEL®

LIL®

METAGENOM®

ScreenLine®

BRAINzymes®

EvoSolution®

CompActives®

R&D machinery of modular technology platforms

- From Discovery to Process Development

Pioneering R&D

- First mover in industrial Metagenome technology
- First mover in Human Taste Cell technology
- First mover in novel Anti-perspirant research ...

Growing Business Segments

Growth strategy prioritizing product-scalable business options.



Products

Growing Product Sales

- Product sales account for more than 60% of the BRAIN group revenues
- Portfolio of >100 specialty B2B products
- Business model: product sales

Segment BioIndustrial

New Product Development

New Product Development

- Pipeline of 12 R&D programs fuelling product business
- Business model:
 - a) product sales
 - b) product scalable royalties via industrial partnerships

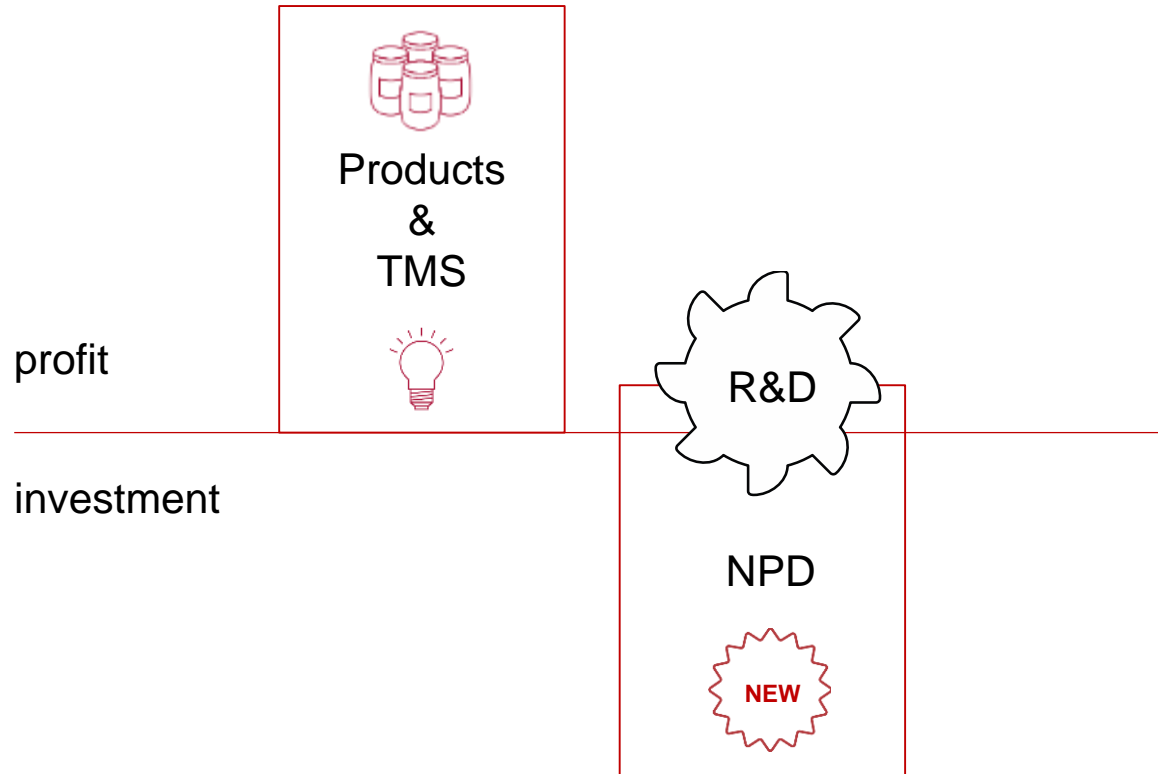
Segment BioScience

Tailor-Made Solutions

Programs for Industry

- BRAIN AG has a long track record with dedicated contract R&D programs
- Business model: tech-access, fees and milestone payments or royalties

Investing in R&D to Enable Business Opportunities



- EBITDA: -2.6 m EUR (12M 2018/19)
- ~ 5-7m EUR p.a. are being invested into own R&D to create emerging and optional business opportunities

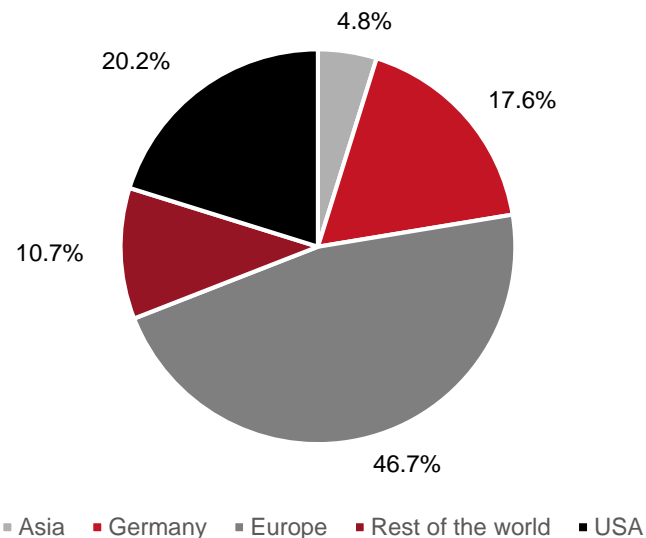
Products



Growing Product Sales

Existing Product Business (Segment BioIndustrial)

- 100+ specialty products for various B2B markets
- Currently sold into ~ 60 countries
- Product sales currently account for more than 72% of the Group revenues
- Good growth performance: In 12M FY 2018/19 TOP grew +35% yoy and +16% in Q4 compared to previous year
- Product Revenues per Region 12M FY2018/19



Growing product sales: Top 10 enzyme products



Brand	Enzyme Class	Application	Growth (YOY)
Flavorpro™	Protease	FLAVOUR creation	> 20%
Flavorpro™	Peptidase	FLAVOUR debittering	> 20%
Promod™	Protease	PROTEIN modification gluten	> 20%
Promod™	Protease	PROTEIN modification hydrolysates	> 20%
Depol™	Betaglucanase	FRUIT / VEGETABLES Naturals extraction	10 - 20%
NATUZYM	Pectinase	FRUIT / BEVERAGE Juice yield increase	10 -20%
Pectinase	Polygalacturonase	FRUIT / VEGETABLES Juice yield improvement	< 10%
Lipomod™	Esterase	DAIRY flavour	< 10%
Δ-zym	Glucoamylase	STARCH / BioETOH saccharification	< 10%
Δ-zym	Alpha-amylase	STARCH / BioETOH liquefaction	< 10%

New Product Development Pipeline



How we focus on attractive markets

Realizing sales of existing products plus strong new product development pipeline.



BU Industrial BioSolutions

Starter Cultures and Performance Microorganisms for Green & Urban Mining and CO₂ conversion to bioplastics



BU Nutrition & Health



Enzymes, Starter Cultures and Natural Ingredients for Food, Feed, Pet food, Beverages






















BU Skin Care

Active Ingredients, formulated Ingredients and White Label Systems for biological Skin Care





New Product Development Pipeline

Pipeline	Partner	R&D	Market	Own Production
Starch processing enzymes				Yes
Green Metal Mining				tbd
Natural beverages				Yes
Salt taste enhancer 1.0	US-CPGC			No
Gold from Waste Streams				Yes
Specialty Enzymes Food				Yes
Aurase	SolasCure			Yes
DOLCE Natural Sweet Enhancers				No
Salt taste enhancer 2.0				Yes
Natural antimicrobials	Jap. Bev-Co.			No
DOLCE Natural Sweet Solutions				No
CO ₂ for value chemicals				No

- BRAIN plans to be supplier of active ingredient in 7 out of 12 programs

Green & Urban Mining – Need For Biological Solutions

Global Mining Market	Challenge	BRAIN Solution
Urban Mining <ul style="list-style-type: none"> E-scrap globally: 42m t p.a. (D: 1.8m t) 1 ton computer platines may contain up to 250 g gold and up to 1 kg silver (~ 200 x higher concentrated than in average ore) Green Mining <ul style="list-style-type: none"> Global mining chemicals market US\$ 10 bn (outlook 2017-2026) 	Find sustainable and environmental friendly to isolate gold from different ressourses	<p>Microorganisms for gold mining in ore and wastestream</p>  <p>BioFlotation Tech-scale-plant at BRAIN</p>  <p>Mobile BioXtractor for on site-validation</p>

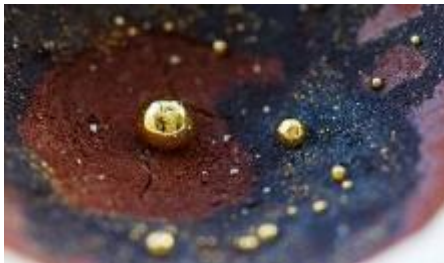
Source: Research and Markets, 2018; Gold.de; United Nations University, 2014; <https://de.statista.com>, 2017

Chemicals-replacing microorganisms for Green & Urban Mining

Two running businesses at BRAIN

A: Gold & Silver from ore

- Partnered with CyPlus
- Business model: Fees, milestone payments & royalties for BRAIN
Additional production of performance micro-organisms through BRAIN under discussions



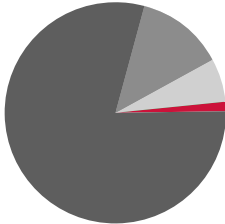





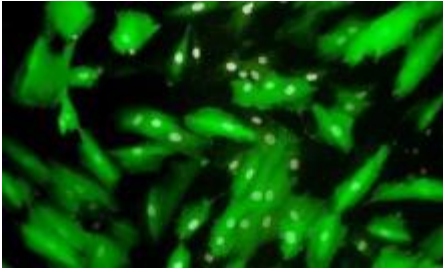
B: Gold & Silver from secondary resources

- Program and IP with BRAIN BioXtractor as pilot plant
- Business model: Joint development and marketing




Upside: Technology can be adapted on other precious metals (IP with BRAIN)

DOLCE Program – Next Generation Natural Based Sweeteners

Global Sugar Market	Challenge	BRAIN Solution
<ul style="list-style-type: none"> • > 61 bn US\$² • 185 mio tons¹ (2017) • Big potential for natural sweet solutions with currently only 1% market share³  <p>  Sugar (82% of total sweetener market)  High fructose corn syrup  Others (e.g. sugar alcohols)  Natural High Intensity Sweeteners (HIS) </p>	<ul style="list-style-type: none"> • Finding natural sweetener and sweet taste enhancer without a loss in taste 	 <ul style="list-style-type: none"> • Next generation natural sweetener and sweet taste enhancer 

Sources: ¹USDA 2017, ²Finanzen.net 01/2018, ³LMC-Report 2015 & nutraceuticalsworld.com 2017

DOLCE Program – Next Generation Natural Based Sweeteners

Reshape business options	Actual development
<ul style="list-style-type: none"> • Increase business development to reach out to new DOLCE members • Easier access to the program for non-exclusive partnerships • In March 2019 new globally acting Europe-based member announced in field “beverages” • Exclusive partnership for category “non-alcoholic beverages” in place 	<ul style="list-style-type: none"> • Program successful and on track • Formulation of novel natural sweeteners and sweet taste enhancers • Several milestones achieved 

DOLCE



World market leading food manufacturing and converting industry.





DOLCE Core Team



Access to all-natural ingredients and top-notch screening technologies.



FRESCO: Natural microbial control for food safety

Global Food Waste	Challenge	BRAIN Solution
<ul style="list-style-type: none">• Globally, 1.3bn tons of food are thrown away p.a.- 180 to 190 kg per head^{1;2}• Food losses worldwide: 30 and 40%²• Approximately 70% of food losses are post-harvest losses³• One quarter saved, could feed 870m people³• 21% of food waste arises from spoilage⁴	<ul style="list-style-type: none">• Sustainable use of food products• Natural preserving agents to reduce post-harvest losses 	 <ul style="list-style-type: none">• Natural preserving agents from the BioArchive

Source: ¹ New York Times 2017; ² WWF Deutschland 2015; ³ UN F.A.O. 2015; ⁴ wrapni.org.uk 2011

FRESCO: Natural microbial control for food safety

Partnerships

- Edible plants contain bioactive compounds that combat harmful spoilage organisms. BRAIN's FRESCO program identifies and provides the best candidates.
- Joint industrial partnership of AnalytiCon Discovery GmbH, BRAIN AG and a globally acting Japanese beverage company
- Further companies invited to join FRESCO

Market

- Total biocide market: 8.5 bn US\$¹
- Actual antimicrobials / preserving agents are under discussion; not only in food sector
- Increased consumer demand for healthy, all natural food and clean label
- Consumers favour product freshness and stability to be achieved by means of natural active ingredients



Source: ¹ gminsights.com

Aurase® for Advanced Wound Management

Global Wound Care Market	Challenge	BRAIN Solution
<ul style="list-style-type: none"> Chronic wounds: growing in incidence (diabetes and ageing) In 2012 worldwide 40.5m patients¹, 2.7m in Germany² Costs per patient in Germany: 9,570 € p.a., ~20% for medication³ Global wound care market 2016: 17.7 bn US\$⁴ and at 22 bn US\$ by 2022; CAGR of 3.7% (2017-2022)⁴ 	<ul style="list-style-type: none"> Finding natural wound cleaning solutions 	<div data-bbox="1487 411 1839 811" data-label="Image"> </div> <ul style="list-style-type: none"> Aurase® is an enzyme for wound cleaning Aurase® IP is with BRAIN (WO 2010/099955)

Sources: ¹ Global Industry Analysis, Inc. 2016; ² PMV 2015; ³ Stat. Bundesamt 2013; ⁴ MarketsandMarkets, 2017

SolasCure® Ltd. – Revolutionising Wound Care

SolasCure is part of BRAIN's strategy to strengthen growth

- Mission SolasCure: support healthcare professionals with groundbreaking wound care products
- BRAIN has licensed IP for the commercialization of future Aurase®-based products to SolasCure
- BRAIN will supply the enzymatic ingredient Aurase® to SolasCure



SolasCure team with successful track records in wound business

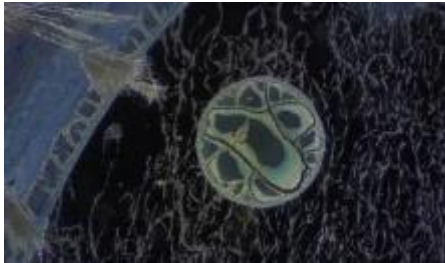
- **Dr Sam Bakri** (*Executive Chairman*): healthcare entrepreneur, co-founder of SolasCure and other medical technology companies
- **Dr David Goldsmith** (*CMO*): several academic positions in Europe
- **Prof Keith Harding** (*Chairman of the Medical Advisory Board*): Director of the 'Welsh Wound Innovation Centre' at Cardiff University



...and an even more disruptive outlook



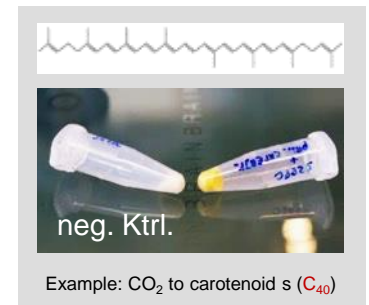
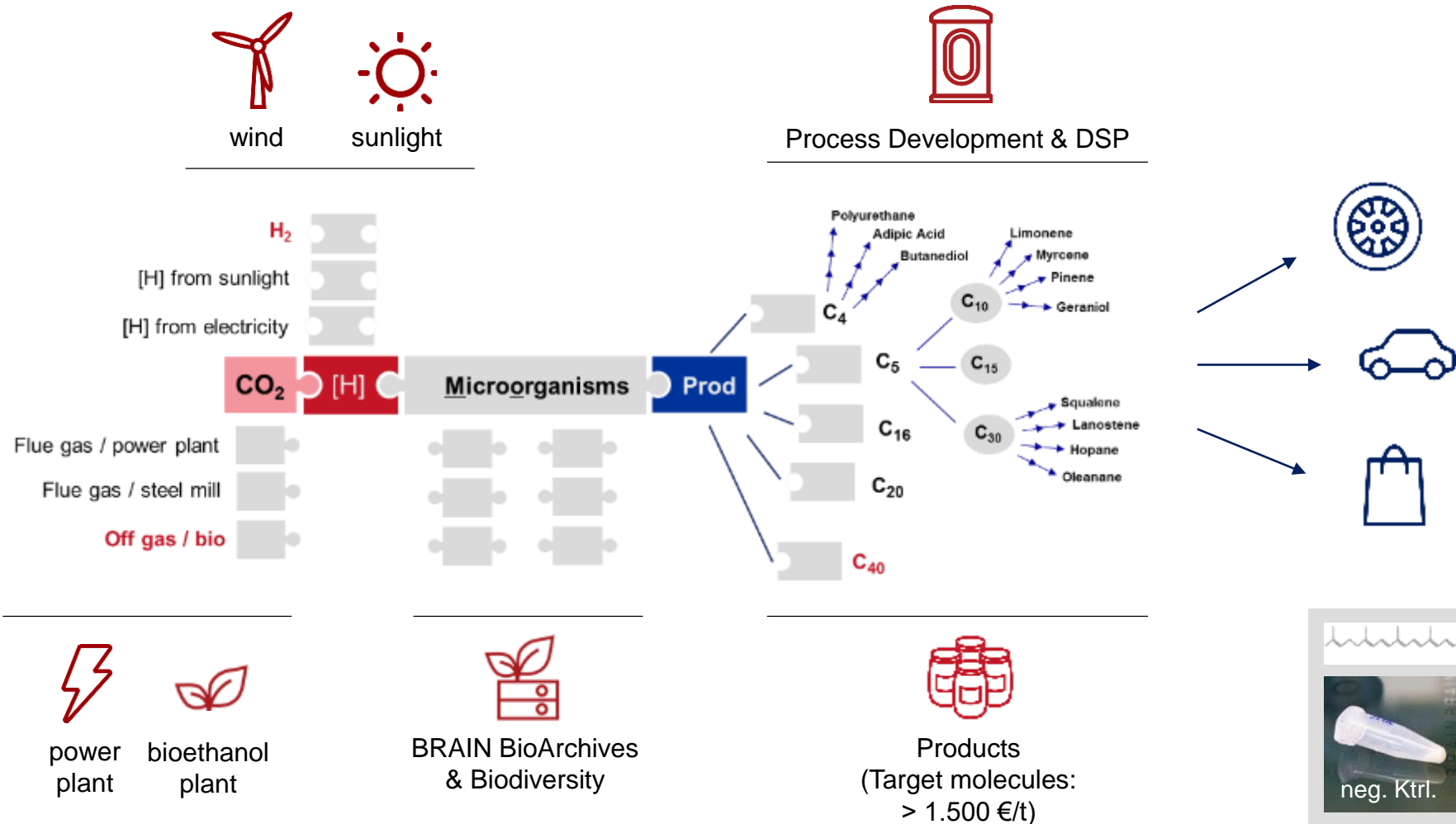
Biological CO₂ Fixation

CO ₂	Challenge	BRAIN Solution
<ul style="list-style-type: none"> CO₂ emissions are driving global warming and climate change CO₂ is a natural nutrient and building block in the formation of biomass by plants and bacteria 	<ul style="list-style-type: none"> Use of CO₂ as carbon source (feedstock) 	<p>Biogenic CO₂ Fixation</p> <ul style="list-style-type: none"> Partner: Südzucker Field: Biological CO₂ Fixation Source: Biogenic CO₂ Product: Dicarmonic acid Deal: R&D partnership, License for Biomass <p>Upside: other products</p> <ol style="list-style-type: none"> Terpenoids (e.g. squalane (C30) with 37 000 EUR / ton¹) Fatty acids (1 500 EUR / ton for C16)

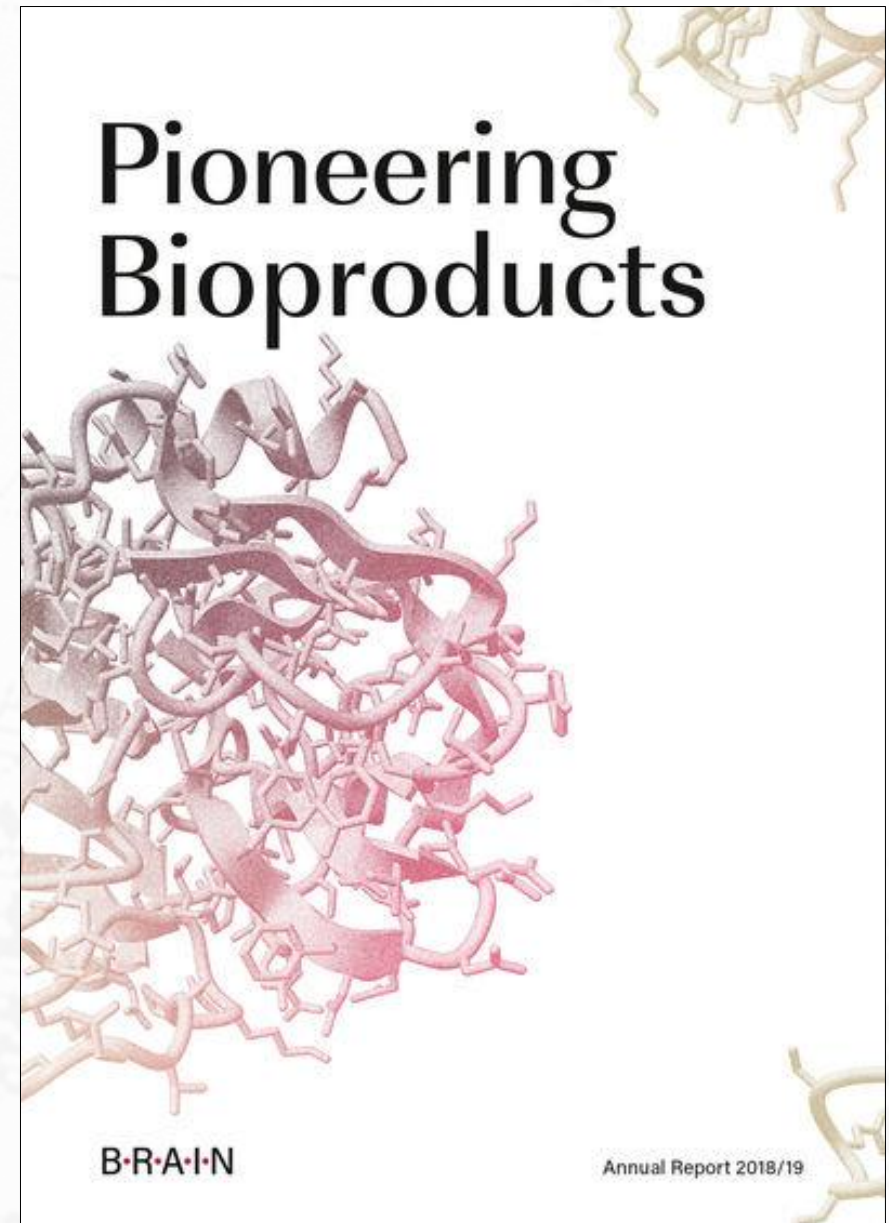
Source: ¹ www.synbiowatch.org

BRAIN technology suitable for CO₂ utilization

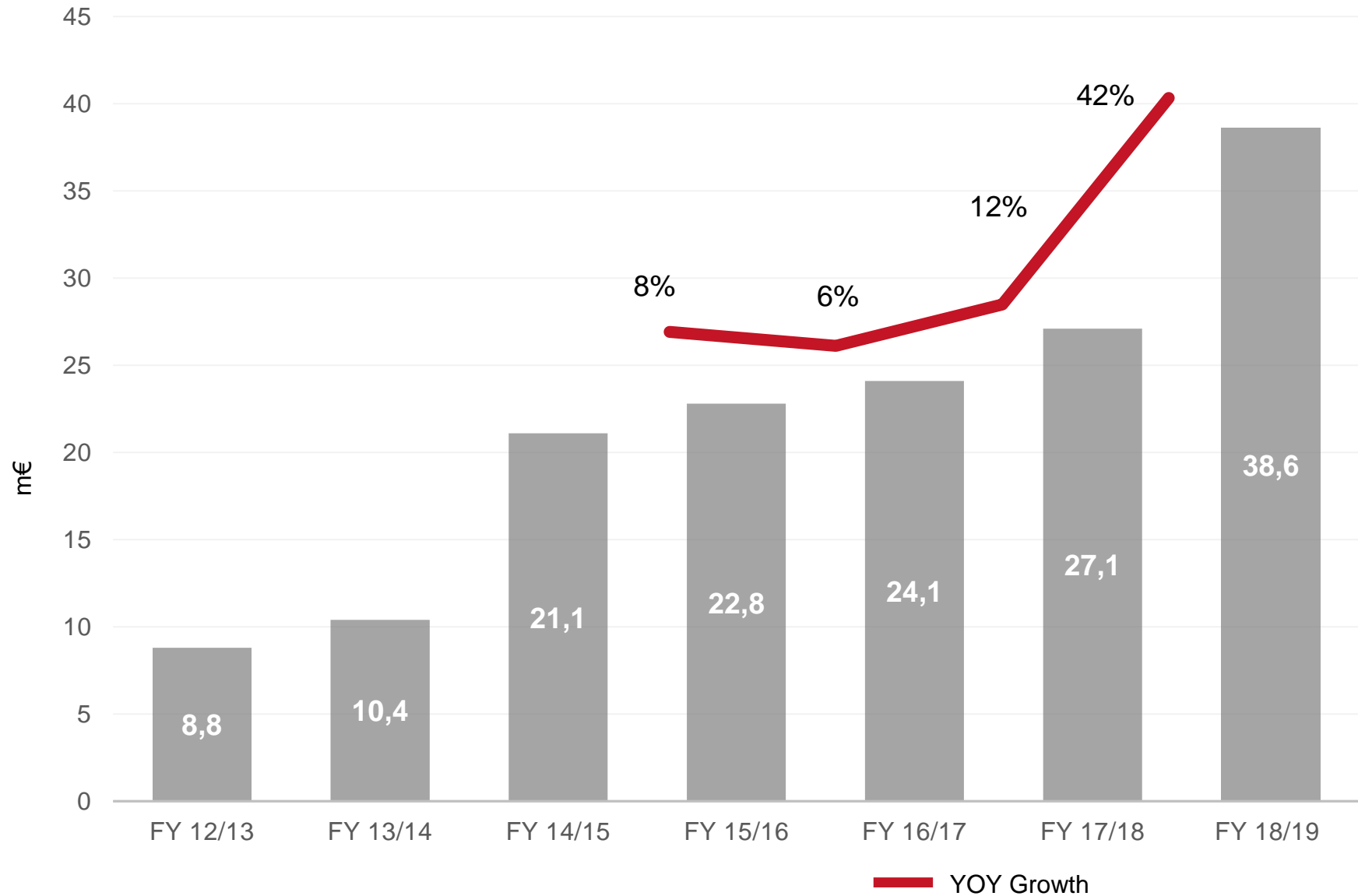
A modular BioRefinery concept



Key Financials



BRAIN Revenue Performance History



Key consolidated financials 12M 2018/19

	12M	12M
(in € million)	2018/19	2017/18
Revenues	38.6	27.1
BioScience	12.2	8.3
BioIndustrial	26.4	18.8
Total operating performance¹	41.2	30.5
Adjusted EBITDA²	-2.1	-5.3
EBITDA	-2.5	-6.6
EBIT	-7.2	-9.6
Net result	-10.5	-8.1
Operating cash flow	-3.4	-5.4
	30.09.2019	30.09.2018
Cash	15.2	25.5

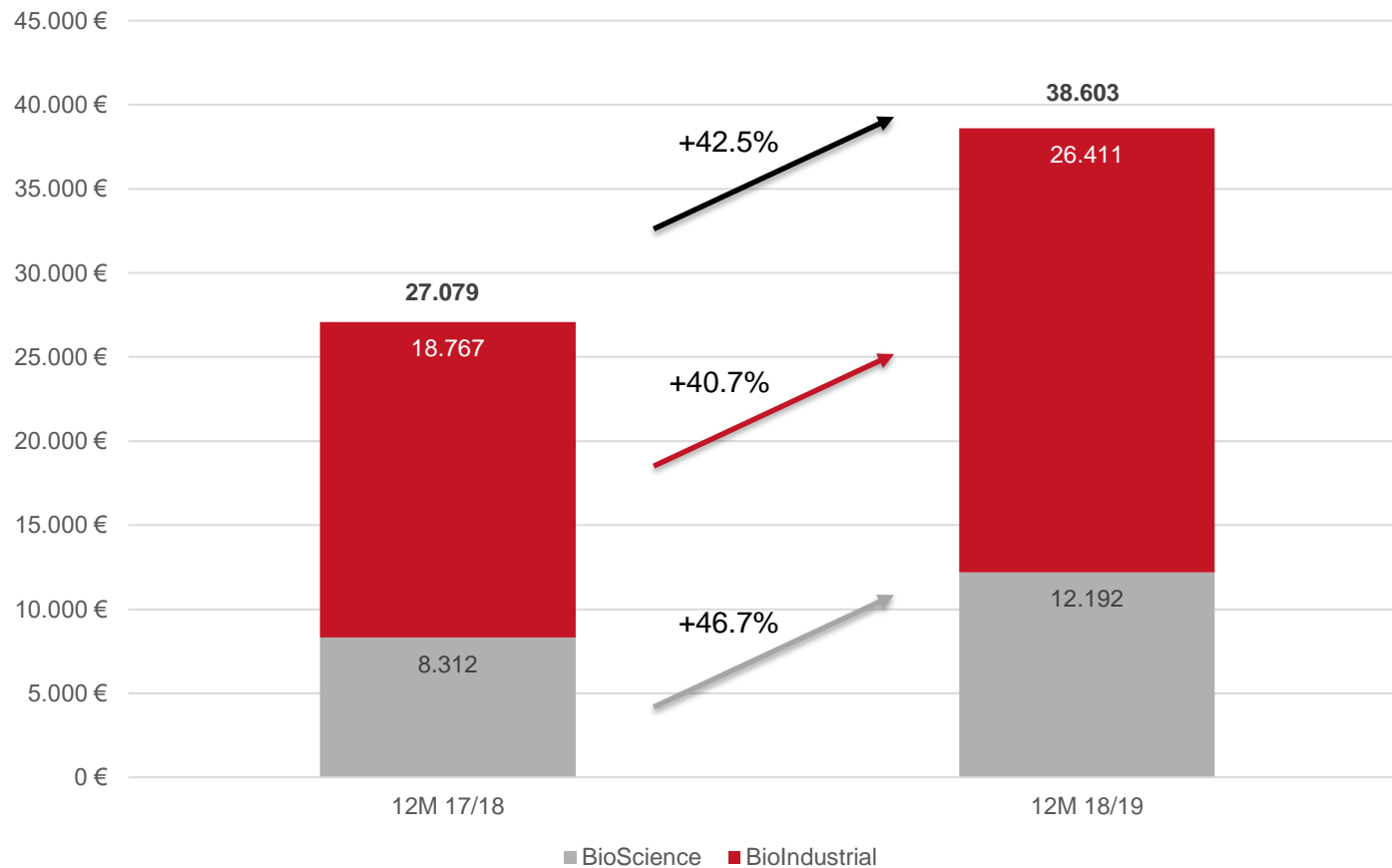
¹ Revenues + change in inventories + other income + R&D grants

² The reconciliation from adjusted to unadjusted EBITDA will be found in the consolidated balance sheet as of 30 September 2019.

Key consolidated financials 12M 2018/19

- BRAIN Group revenues increased by 42.5% to **€38.6m** (PY €27.1m)
 - Group generated a **total operating performance (TOP)** of **€ 41.2m** vs. PY € 30.5m (+35.3%)
 - The “**BioScience**” segment increased its **TOP** by 26.0% to **€ 14.0m** (PY € 11.1m), mainly due to new and follow-up projects
 - TOP of the “**BioIndustrial**” segment increased to **€ 27.4m** (+40.8%), with positive impacts coming from consolidation of Biocatalysts as well as an increasing operating business
- The **reported Group adjusted EBITDA** accounts for **€ -2.1m** (PY € -5.3m), driven mainly due to grown revenues and a lower material cost ratio, adjusted for:
 - **€ 35k** for personnel exp. resulting from a share-based compensation scheme at AnalytiCon
 - **€ 266k** for personnel exp. resulting from ESOP
 - **€ 27k** for acquisition- and integrations cost
- The **brutto cash-flow** at **€ -6.3m** vs. €-9.0m reflects the stronger operating performance y-o-y, **Cash position** as at 30.09.2019 accounts for € 15.2m

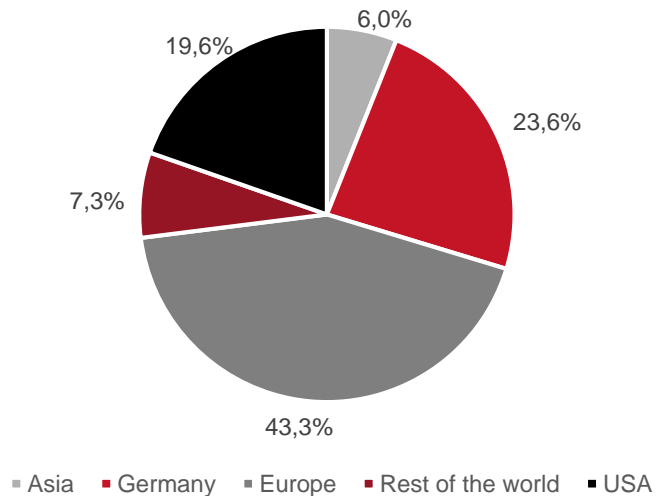
Group Revenues per segment 12M 2018/19



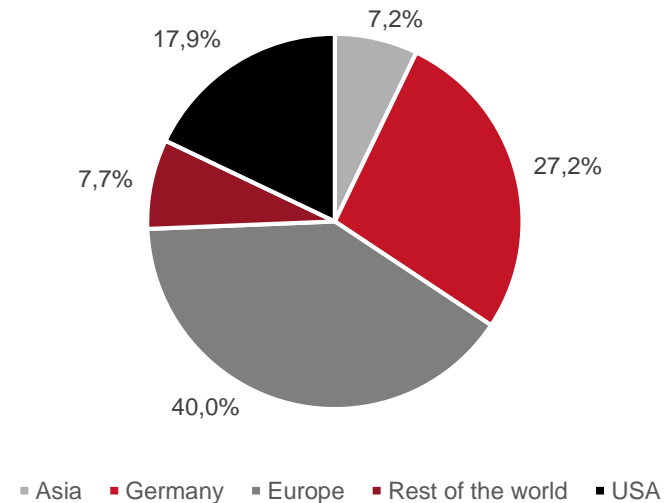
- Year over year (yoy) both segments performed excellent.

Group Revenues per Region

Revenues per Region 12M 18/19

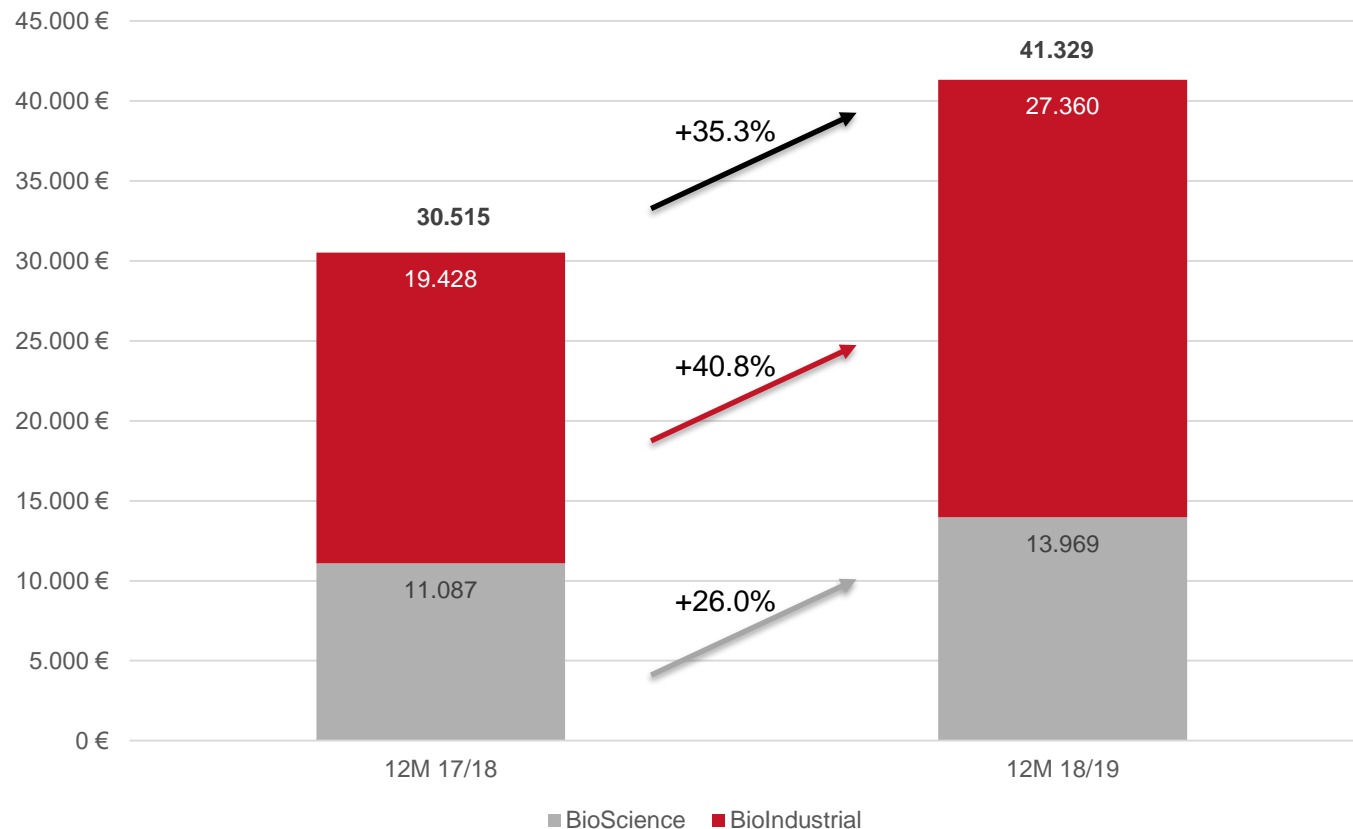


Revenues per Region 12M 17/18



- Percentage revenues per region did not significantly change to full year 17/18.
- Therefore all regions grew at a similar level.

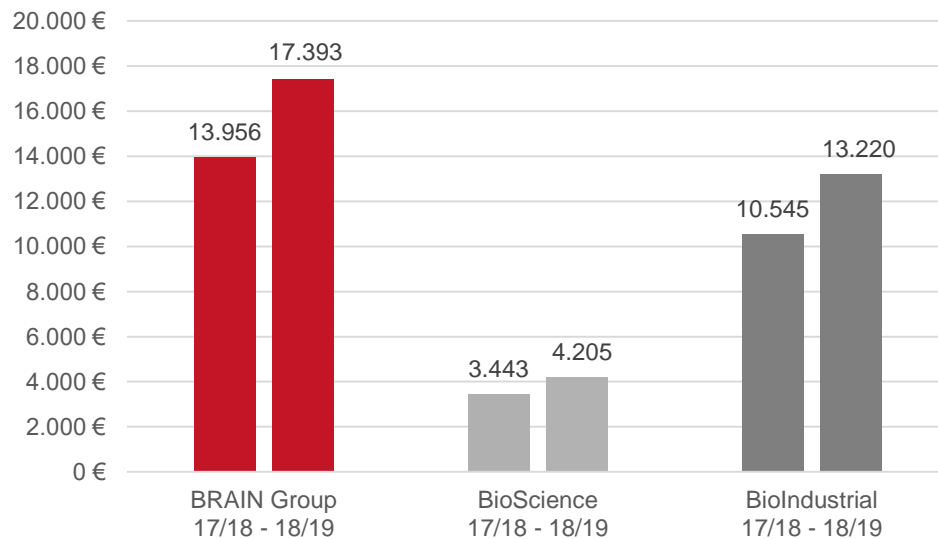
Group Total Operating Performance (TOP) Group 12M 2018/19



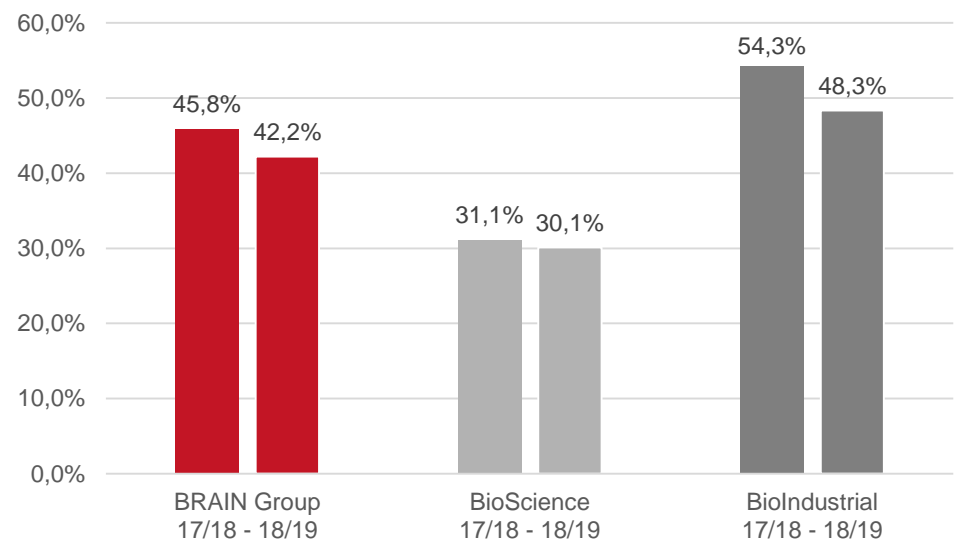
- Groups TOP grew at 35.3%.
- Both segments contributed to a strong growth.
- Growth lower than Revenue growth due to lower grant income and lower other income.

Material Expenses

Material expenses 12M 18/19



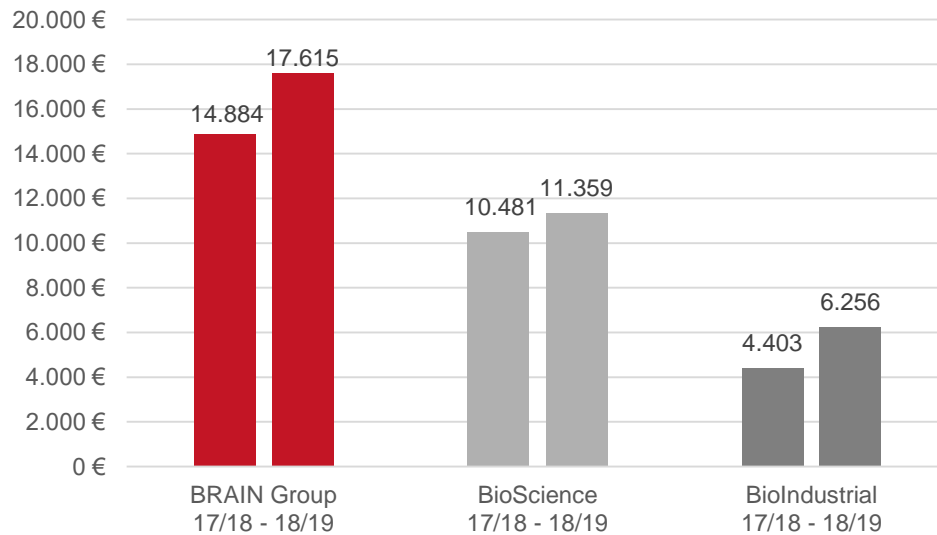
Material expenses ratio 12M 18/19



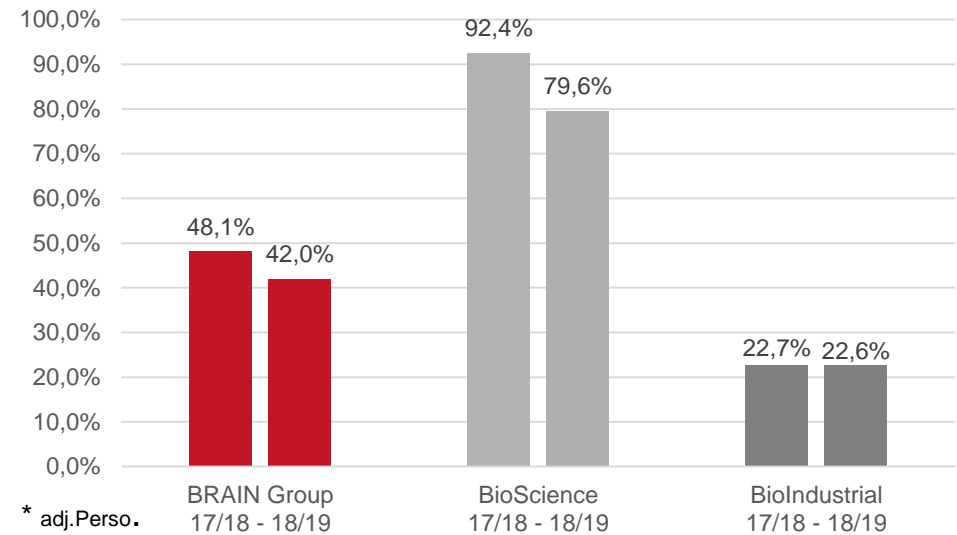
- Material expenses grew but at a lower rate than TOP.
- Material expenses ratio (compared to TOP) decreased in both segments.

Personnel Expenses

Personell expenses 12M 18/19



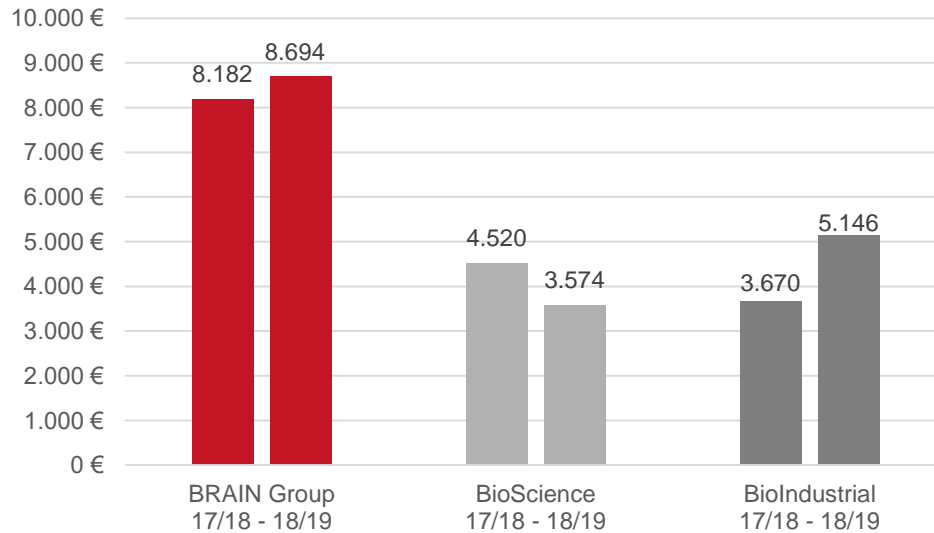
Personell expenses ratio 12M 18/19



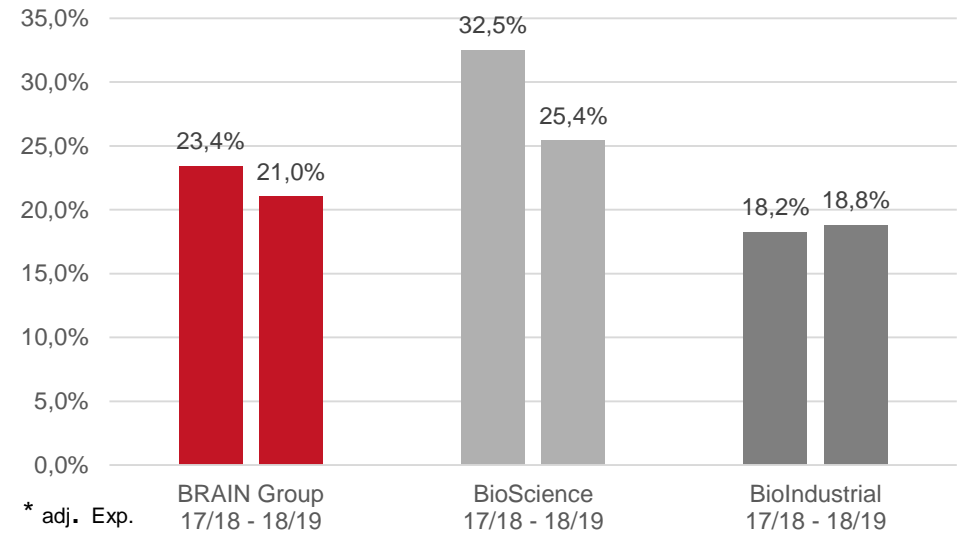
- Personnel expenses grew but at a lower rate than TOP.
- Personnel expenses ratio (compared to TOP) decreased in both segments.

Other Expenses

Other expenses 12M 18/19

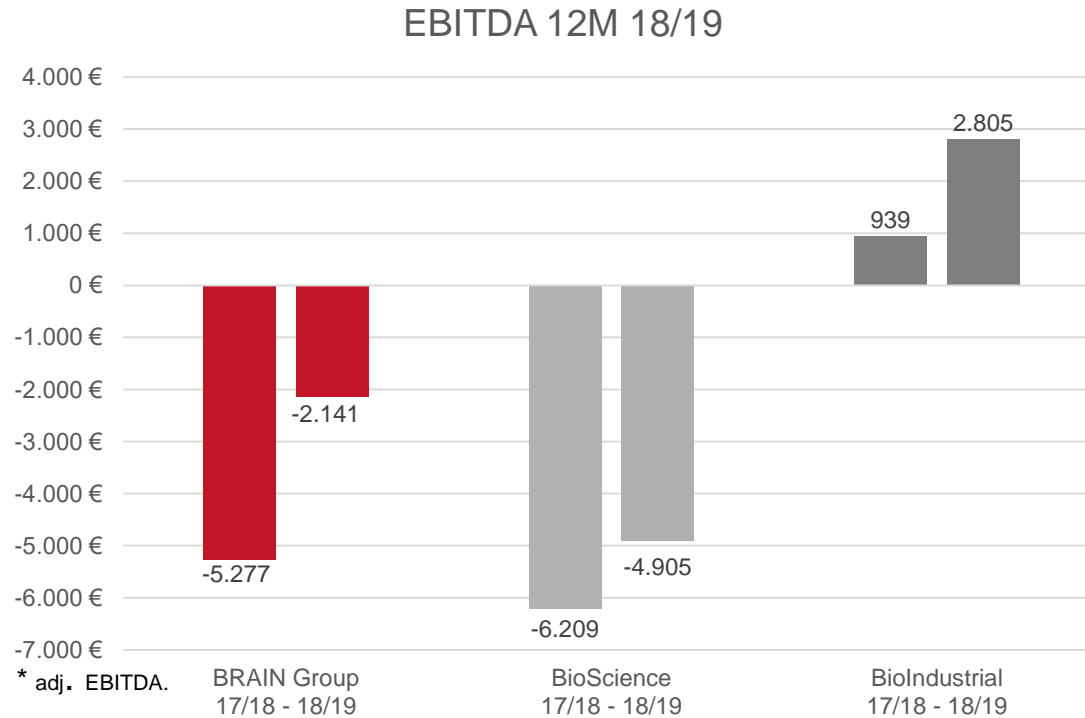


Other expenses ratio 12M 18/19



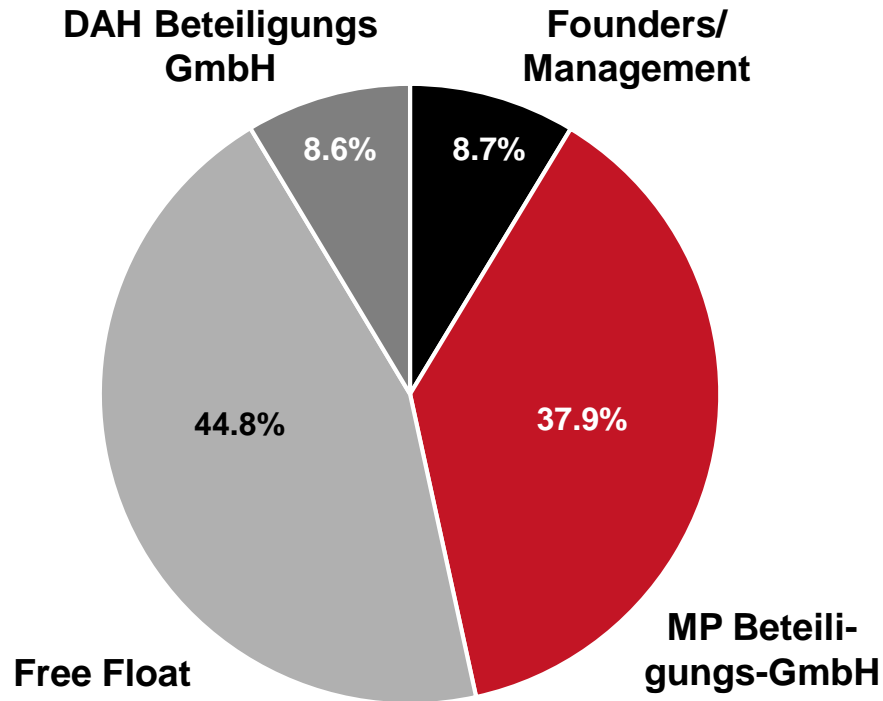
- Other expenses also grew but also at a lower rate than TOP.
- Other expenses ratio (compared to TOP) therefore decreased in BioScience.

EBITDA 12M 18/19



- The group's EBITDA improved at about 59.4%.
- Both segments contributed to a better EBITDA.
- Especially the segment BioIndustrial improved its EBITDA margin significantly due to an increase in volume.

Shareholder structure of BRAIN



Notes

- Current number of shares: 18,055,782
- Free float of ~45.0%
- Strong long term investor base
- ~ 7,000 shareholders
- WKN 520394 / ISIN DE0005203947 /
- Symbol BNN
- Prime Standard; Frankfurt/M

September 30, 2019

Financial Calendar FY 2018/19 and FY 2019/20

February 28, 2020	Publication of the quarterly report for the period ending 31 December 2019 (3M)
March 05, 2020	Annual General Meeting in Zwingenberg, Germany
May 29, 2020	Publication of the quarterly report for the period ending 31 March 2020 (6M)
August 31, 2020	Publication of the quarterly report for the period ending 30 June 2020 (9M)

Analysts covering BRAIN

Analyst	Company	Phone Number
Falko Friedrichs	Deutsche Bank, Frankfurt	+49 69 91 03 62 70
Pierre Corby	ODDO BHF, Paris	+33 1 44 51 84 04
Markus Mayer	Baader Helvea, Munich	+49 89 51 50 18 18
Laura López Pineda	Baader Helvea, Munich	+49 89 51 50 18 04
Dennis Berzhanin	Pareto Securities AS, Frankfurt	+49 69 58 99 7 434
Manuel Mühl	DZ Bank AG, Frankfurt	+49 69 7447 51438

Thank you for your attention.

BRAIN Aktiengesellschaft

Darmstädter Straße 34–36

64673 Zwingenberg, Germany

+49 (0) 6251-9331-0

www.brain-biotech.de

Your contact:

Manfred Bender, Ludger Roedder

mb@brain-biotech.com, lr@brain-biotech.com

+49 (0) 6251-9331-0



@BRAINbiotech



BRAIN AG



Management



Adriaan Moelker
(CEO as of 01.02.2020)

- Master of Business Administration
- Year of birth 1964
- Joins BRAIN in Feb. 2020
- 20+ y of professional experience in industrial biotechnology innovation
- Successful in terms of innovation & revenue
- Extensive global experience in all key industrial enzyme segments



Manfred Bender
(CFO)

- Diploma in Business Administration
- Year of birth: 1965
- Joined BRAIN in 2018
- 20+ y of finance leadership experience as CFO and CEO in listed companies
- Successful in market cap & Revenue Growth
- Asset management, M&A



Ludger Roedder
(CBO)

- Master of Business Administration
- Year of birth: 1965
- Joined BRAIN in 2018
- 20+ y international industry expertise
- Product Development & Industrial Transactions
- Strategy & Portfolio Management