



## CAPITAL MARKETS DAY 2017

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Creating Sustainable Growth

# Welcome to our Capital Markets Day 2017

Time	Topic	Presenter
10:00 - 10:30	Strategic overview	Tjerk de Ruiter
10:30 - 10:40	Sustainability	Marcel Wubbolts
10:40 - 10:55	R&D	Marcel Wubbolts
10:55 - 11:15	Break	
11:15 - 11:25	Ingredient Solutions	Andy Muller
11:25 - 11:35	Bakery	Andy Muller
11:35 - 11:45	Meat	Ruud Peerbooms
11:45 - 12:00	Biochemicals	Frederik Feddes
12:00 - 13:00	Lunch	
13:00 - 13:25	Innovation Platforms	Marc den Hartog
13:25 - 13:45	AlgaPrime DHA	Walt Rakitsky
13:45 - 14:15	Financials	Eddy van Rhede van der Kloot
14:15 - 14:45	Q&A	Executive team
14:45	Closing remarks	Tjerk de Ruiter

# Disclaimer

This presentation contains 'forward-looking statements', based on currently available plans and forecasts. By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future, and Corbion cannot guarantee the accuracy and completeness of forward-looking statements.

These risks and uncertainties include, but are not limited to, factors affecting the realization of ambitions and financial expectations, developments regarding the potential capital raising, exceptional income and expense items, operational developments and trading conditions, economic, political and foreign exchange developments and changes to IFRS reporting rules.

Statements of a forward-looking nature issued by the company must always be assessed in the context of the events, risks and uncertainties of the markets and environments in which Corbion operates. These factors could lead to actual results being materially different from those expected, and Corbion does not undertake to publicly update or revise any of these forward-looking statements.



## STRATEGIC UPDATE

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# Corbion at a glance

## KEY FIGURES (2016)

**€ 911m**  
Net sales

**€ 170m**  
EBITDA excl. one-offs

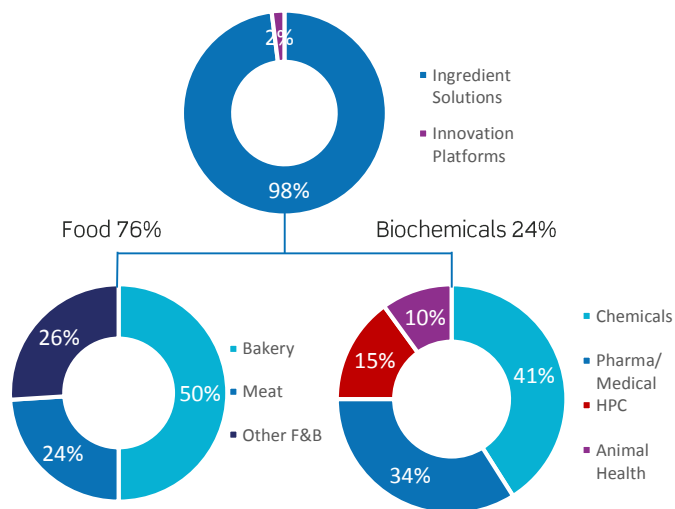
**€ 72m**  
Free cash flow

**0.6x**  
Net leverage

**€ 1.74**  
Earnings per share

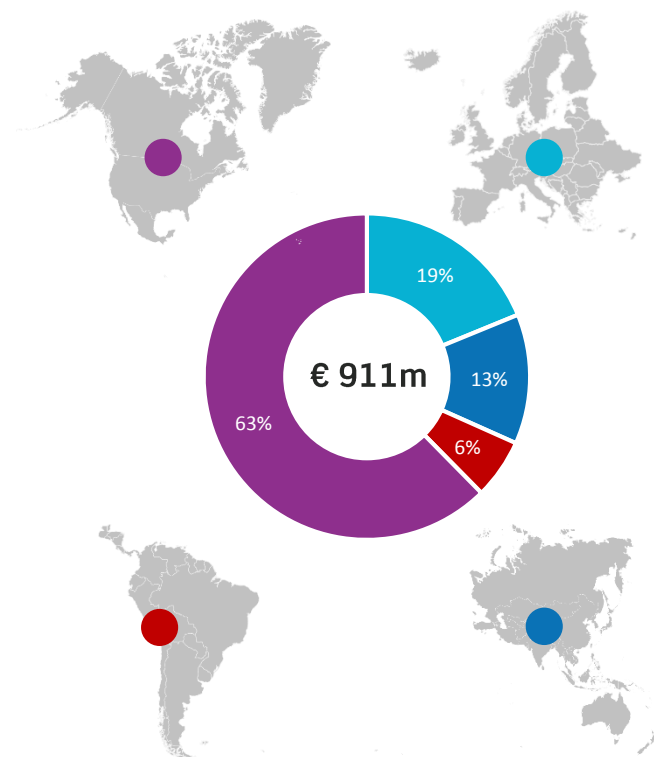
**20.6%**  
ROCE excl. one-offs

## NET SALES



- LEADING MARKET POSITIONS IN SUSTAINABLE FOOD INGREDIENTS AND BIOCHEMICALS
- LARGEST PRODUCER OF LACTIC ACID
- UNIQUE TECHNOLOGY PLATFORM: FERMENTATION OF ORGANIC ACIDS
- 10 PRODUCTION FACILITIES WITH 1,800 EMPLOYEES GLOBALLY

## NET SALES BY REGION (2016)



# Corbions alignment with UN Sustainable Development Goals

Population growth



Food security



Changing values



Climate change & Resource scarcity



2 ZERO HUNGER



- End hunger
- Food security
- Improved nutrition
- Sustainable agriculture

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



- Reduce, re-use & recycle
- Circular economy
- Reduce food waste
- Minimize environmental impact of chemicals

**Corbion's value proposition**

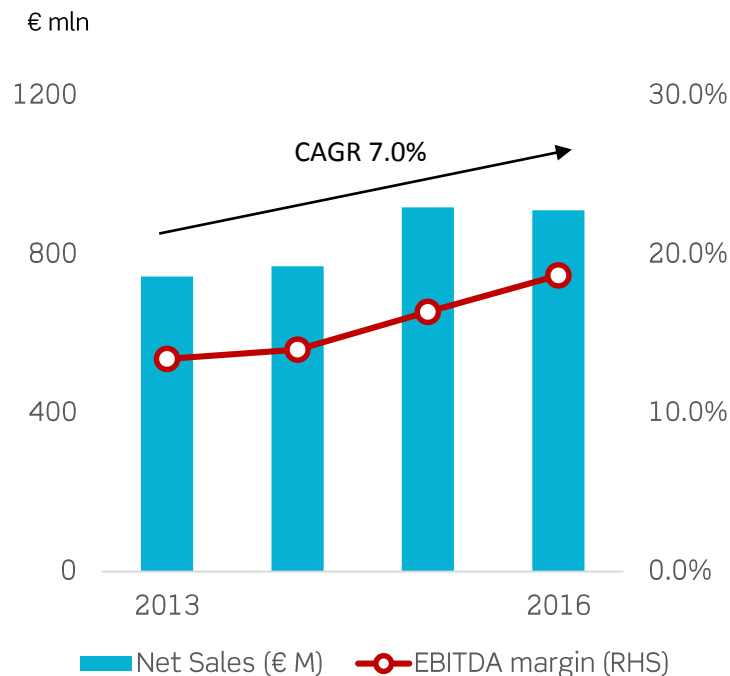
Offering conscious choices through sustainable ingredient solutions uniquely tailored to create customer value

# Purpose - Vision – Mission



# 2014 – 2017: Disciplined Value Creation

## Net sales Corbion



## Key events 2014 - 2017

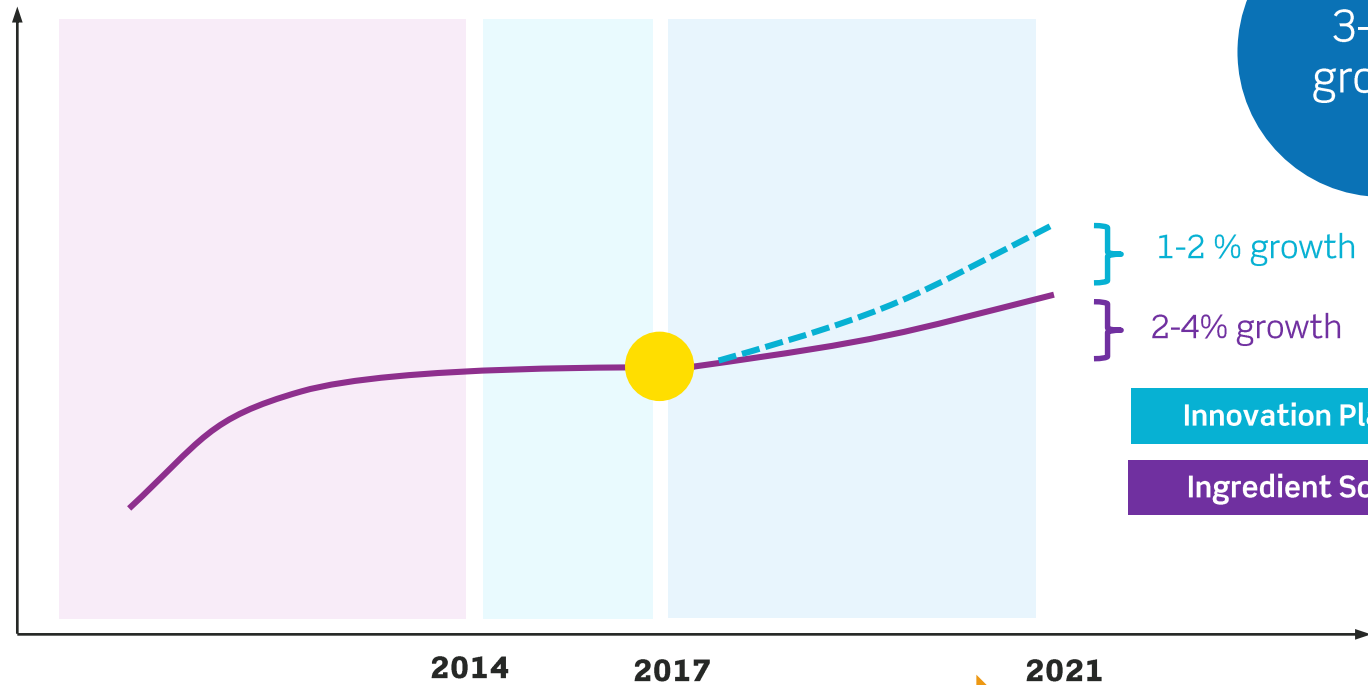
- Clear target setting & strict capital allocation
- Margin improvement through
  - Innovative new products
  - Commercial excellence
  - Project Streamline
  - Optimized production footprint in the US
- Bakery rationalization affected top-line performance adversely
- De-risked and optimized PLA initiative through Joint Venture with Total
- Acquired TerraVia to strengthen growth portfolio

**Well-positioned to enter the next phase of strong organic growth and continued shareholder value creation**



# 2018 -2021: Disciplined Value Creation boosted by Creating Sustainable Growth

Revenues



Creating Sustainable Growth

&

Disciplined Value Creation

# Driving for growth in Ingredient Solutions - Bakery

Solution				
Derivatives				
Product				
	Bakery	Meat	Other Food	Biochemicals



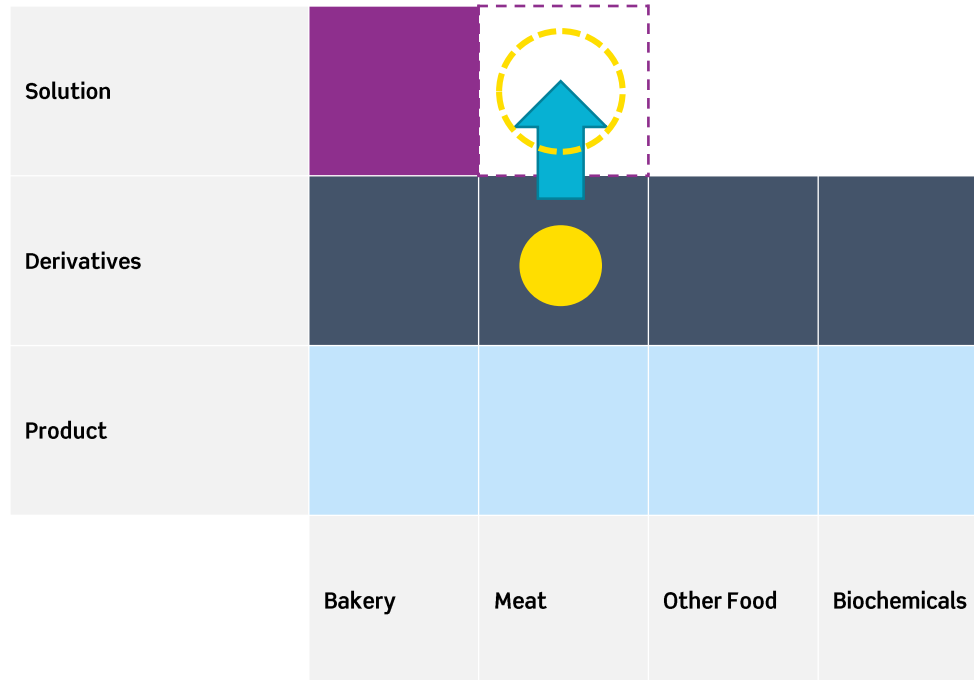
- Expand in LatAm



- US expansion in sweet goods
- US foodservice channel expansion

**With US operations in better shape, expansion Bakery in Latin America, increased focus on non-bread applications, and foodservice channel expansion**

# Driving for growth in Ingredient Solutions - Meat



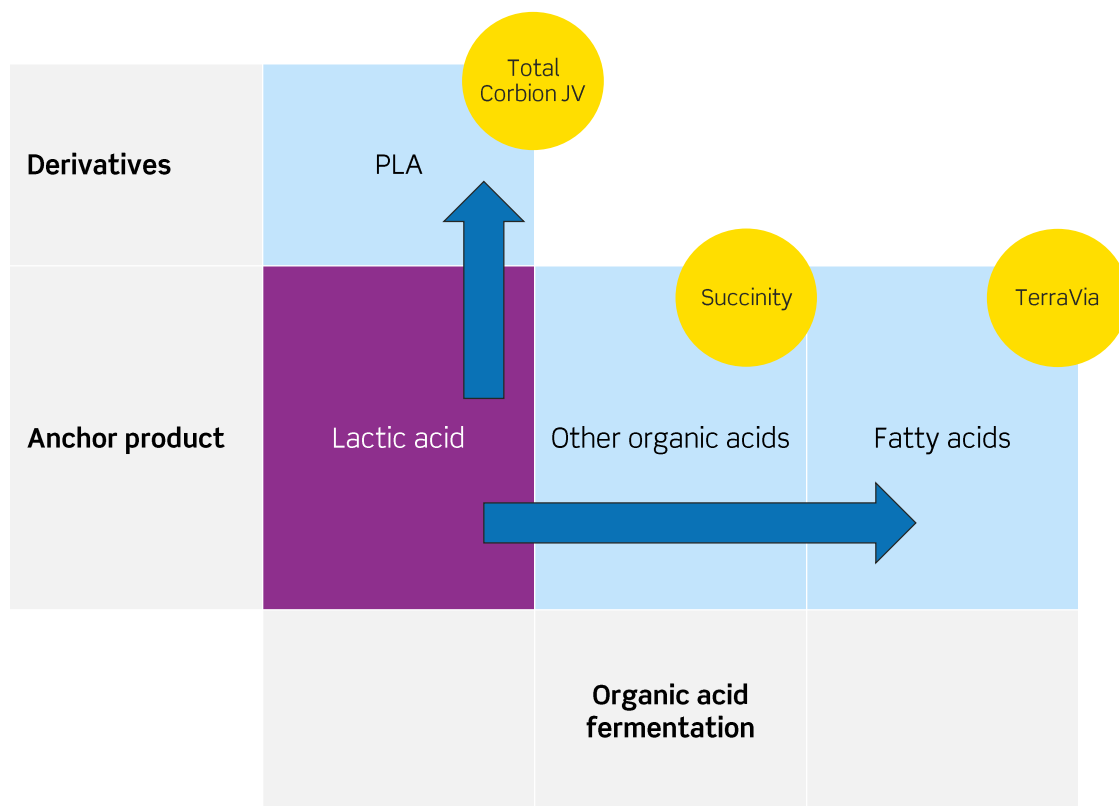
**Meat: Customer demands evolving in mature markets. Moving from product- to solution provider**

# Driving for growth in Ingredient Solutions - Biochemicals

Solution				
Derivatives				
Product				
	Bakery	Meat	Other Food	Biochemicals

- Strengthen broad derivative portfolio
- Key growth segments
  - Pharma
  - Biomedical
  - Electronics
  - Agrochemicals

# Driving for growth in Innovation Platforms



Recent initiatives in PLA and Algae technology will provide meaningful contributions in coming years

# Creating Sustainable Growth

## Strategic levers for success

### Invest to Grow

- Portfolio mix improvements
- Increased R&D intensity

### Fund to invest

- Operating excellence initiatives

## Driving for Growth

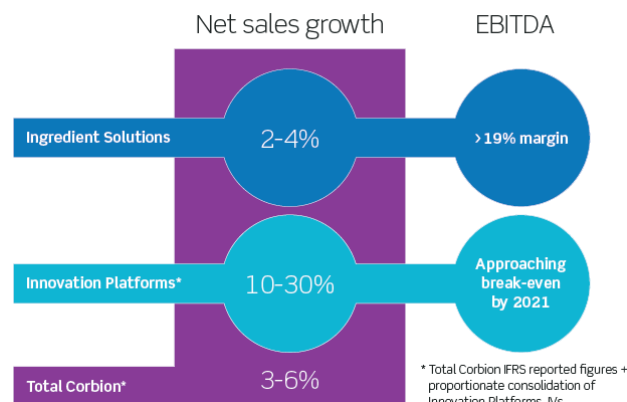
### Ingredient solutions

- Bakery: LatAm expansion, strengthen US
- Meat: From product to solution
- Biochemicals: Biomedical innovations

### Innovation platforms

- PLA
- Omega-3/DHA
- Develop other organic acids

## Key Financial targets



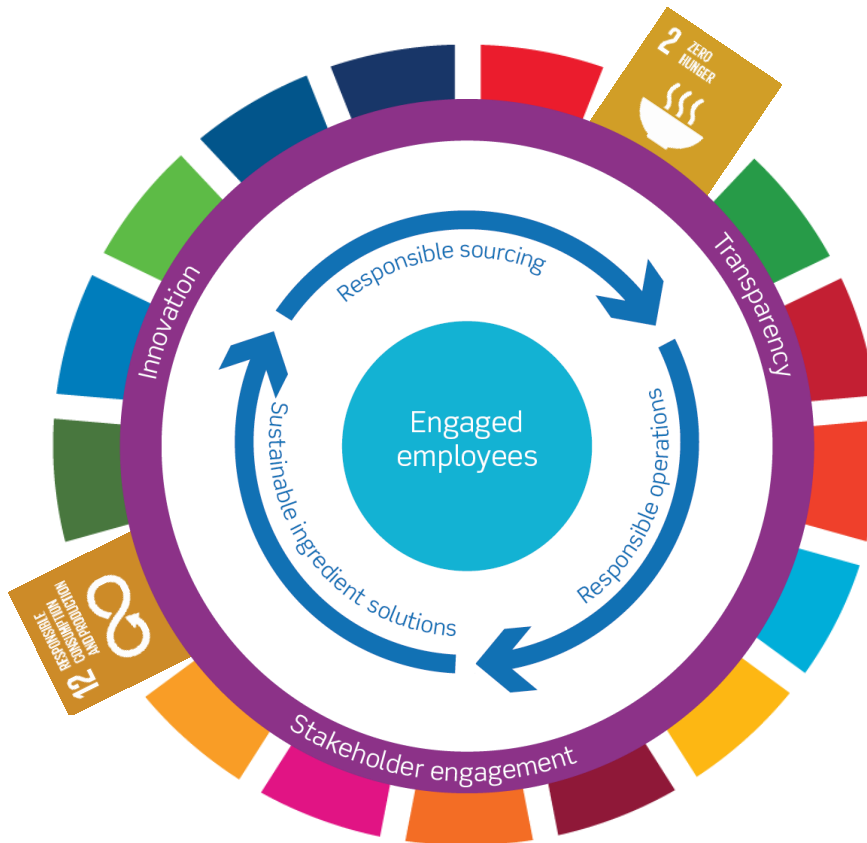


## SUSTAINABILITY

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# Creating a positive impact by growing our business in sustainable ingredient solutions

and maximizing our contribution to zero hunger and responsible production and consumption (SDG 2 &12)



## Ambitions

### Responsible sourcing

Create a sustainable supply chain for Corbion's agricultural raw materials.

### Responsible operations

Create a zero incident and zero waste Corbion.

### Sustainable ingredient solutions

Create solutions based on renewable resources to improve the quality of life for people today and for future generations.



# Alignment with UN Sustainable Development Goals

## Maximize the positive impact of Corbion



- ✓ End hunger
- ✓ Food security
- ✓ Improved nutrition
- ✓ Sustainable agriculture

### How Corbion contributes

- Extended shelf life solutions
- Food safety solutions
- Solutions for healthier food
- Responsible sourcing
- Solutions for sustainable crop protection
- Development alternative feedstocks
- Algae-derived alternatives for palm and soy
- Solutions for aquaculture

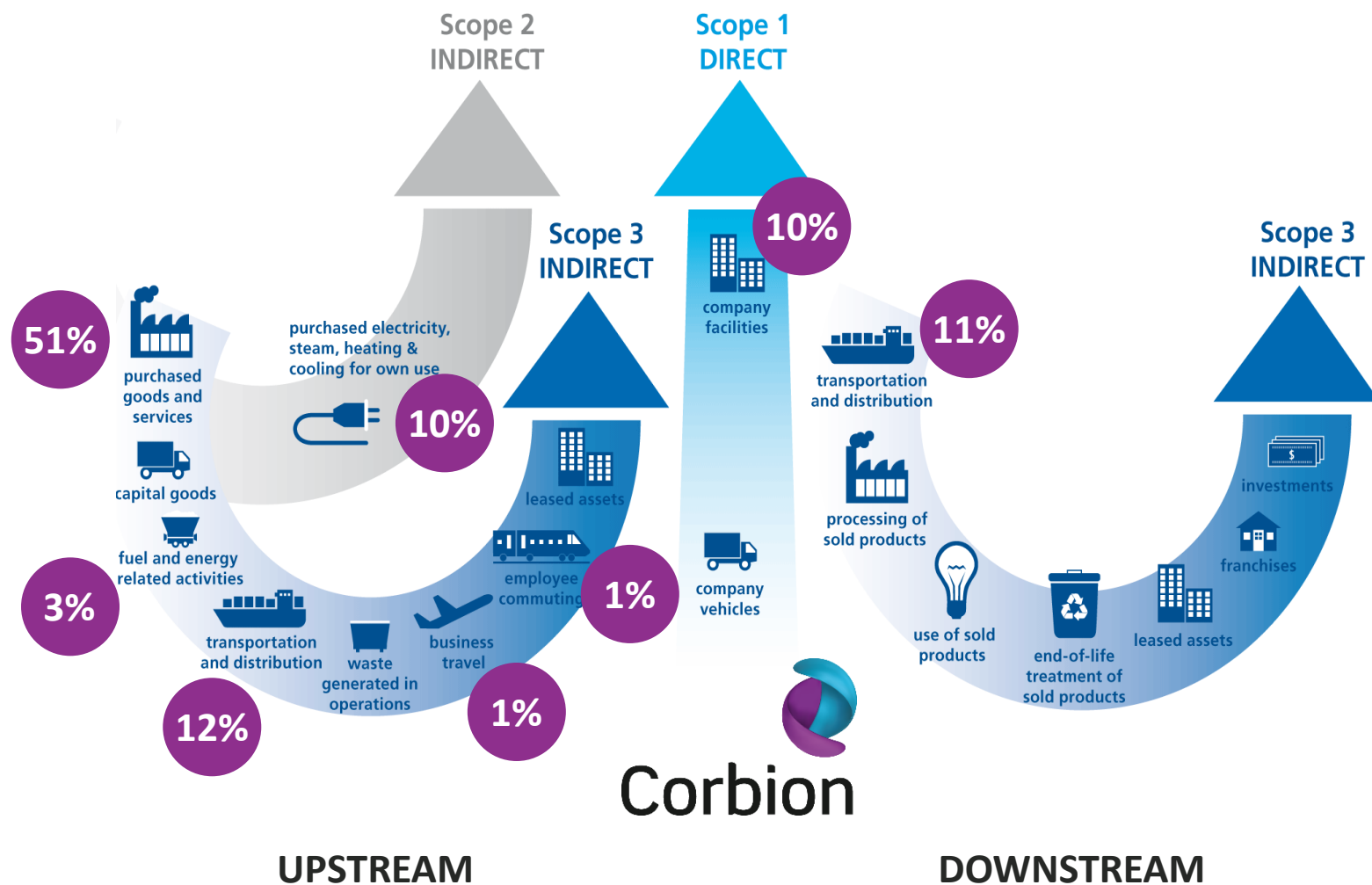


- ✓ Reduce, re-use & recycle
- ✓ Circular economy
- ✓ Reduce food waste
- ✓ Minimize environmental impact of chemicals

### How Corbion contributes

- Biobased solutions for a circular economy
- Solutions to reduce food waste
- Safe alternatives for chemicals of concern
- Byproduct valorization
- Development gypsum-free technology
- Development alternative feedstocks
- Reduce carbon footprint in line with Paris

# Corbion's 2016 carbon footprint

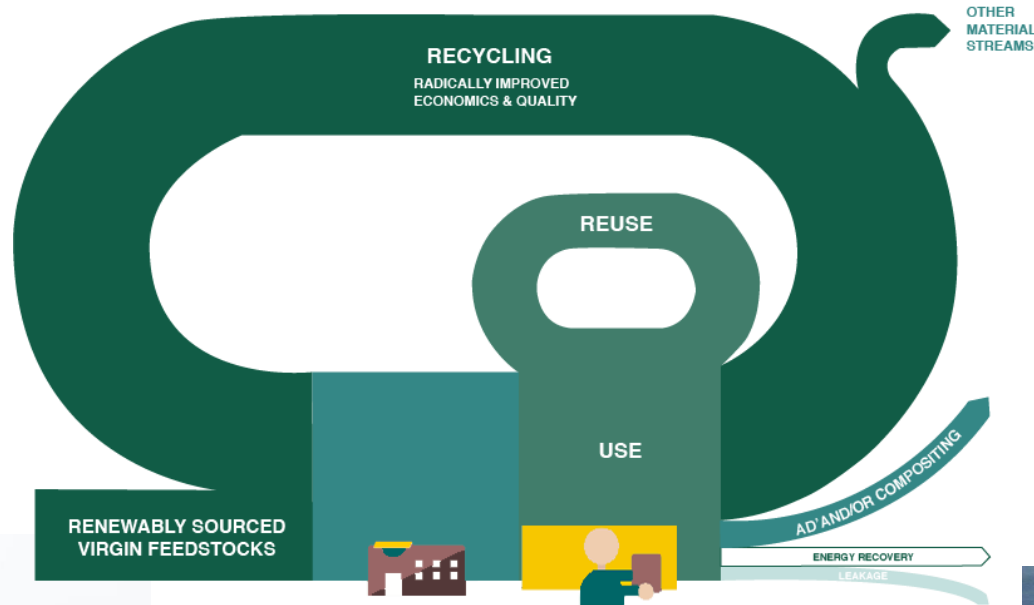


# Circular economy

## Packaging example



1. Create an effective after-use plastics economy



2. Drastically reduce plastic leakage

Source: Ellen MacArthur foundation



3. Decouple plastics from fossil feedstocks



# Sustainability 2030 Targets

## Responsible sourcing

- 100% of key agricultural raw materials responsibly sourced
- Carbon footprint target for Scope 3 upstream emissions based on science based targets methodology

## Responsible operations

- Zero waste to landfill
- 100% renewable electricity
- Carbon footprint target for Scope 1 & 2 emissions based on science based targets methodology
- Total Recordable Injury Rate < 0.25\*

## Sustainable ingredient solutions

- 100% of products with a sustainability value proposition covered by LCA and/or social impact assessment

\* Including contractors



R&D

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## Corbion R&D: *designed by science and powered by nature*

- R&D is a team of 200+ diverse professionals
- Corbion R&D will adopt to accommodate the solution model
- Stage gate approach to drive success rate
- TerraVia asset acquisition adds exciting expansion in our innovation pipeline
- R&D intensity will increase from 3% to 4% of sales





# Corbion Key Science & Technology Competences



- Microbiology
- Enzymology and biochemistry
- Strain development
- Industrial microbiology
- Process development
- Process design
- Formulation technology
- Polymer technology
- Organic chemistry and catalysis
- Physical and colloid chemistry
- Analytical chemistry
- Data Science

Enhanced or extended capabilities as result of the TerraVia acquisition

# Algae fermentation offers wider scope to Corbion

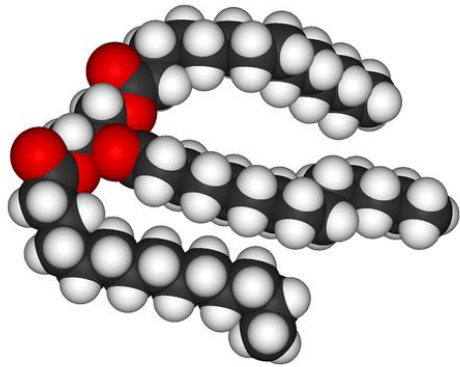
Chain length	C2	C4	C6	C8	C10	C12	C14	C16	C18	C20	C22
				Fatty acids							
Organic acid type	Short chain			Medium chain			Long chain				
Examples	Lactic * Succinic * Acetic Propionic Glycolic Malic FDCA* Citric			Caprylic Capric** Lauric**			Myristic Palmitic Stearic Oleic** Linolenic Linoleic EPA DHA**				
	Corbion			TerraVia							

\* Current Corbion products

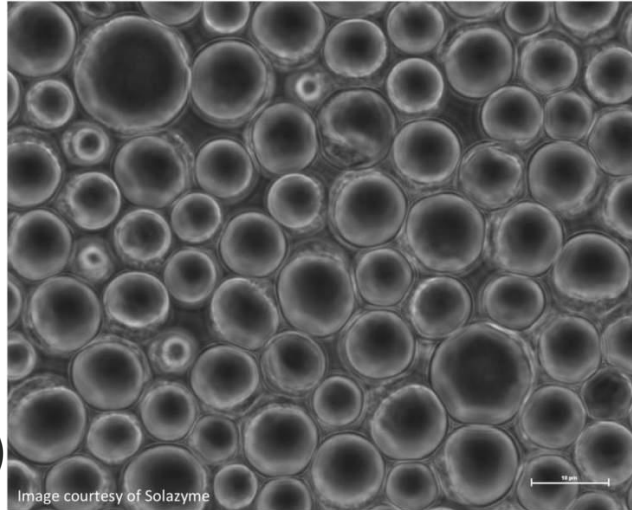
\* Current TerraVia products



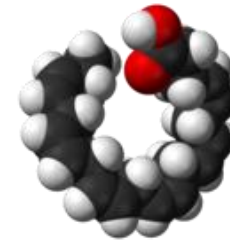
# Algae: high yielding, versatile platform for tailored oils



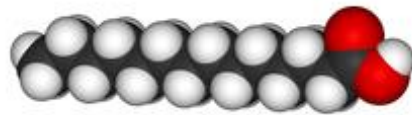
**Triglycerides** (e.g. SOS, POP)



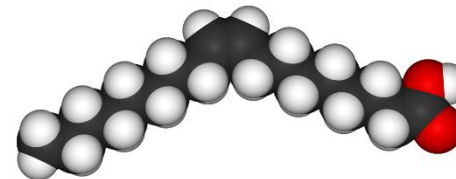
**Algae cells**  
(>80% lipid content)



**PUFAs**  
(e.g. Omega-3 DHA)



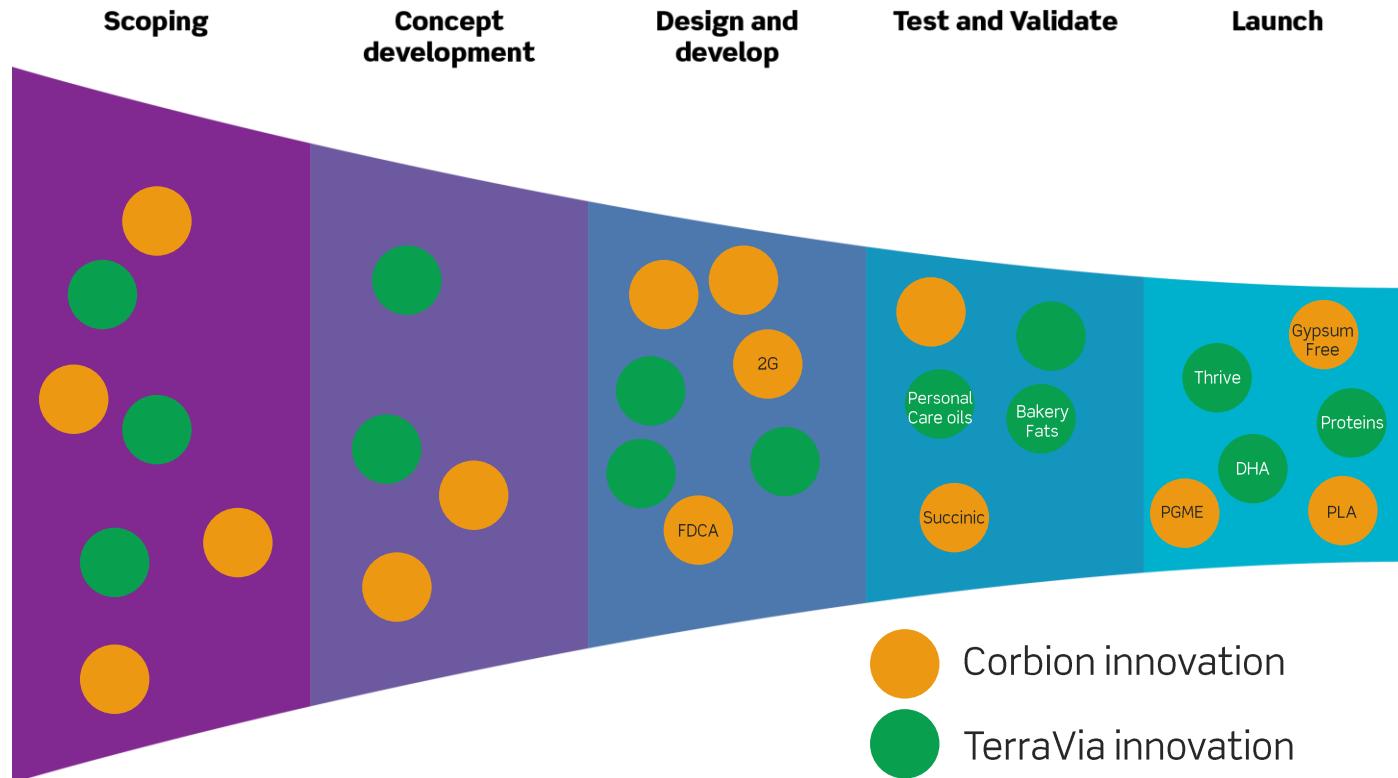
**Saturated Fatty Acids** (e.g. C14:0)



**Unsaturated Fatty Acids** (e.g. C18:1)

**Micro-algae can make the same compounds that plants can make**  
– only faster and in controlled process

## ... and a strong innovation pipeline

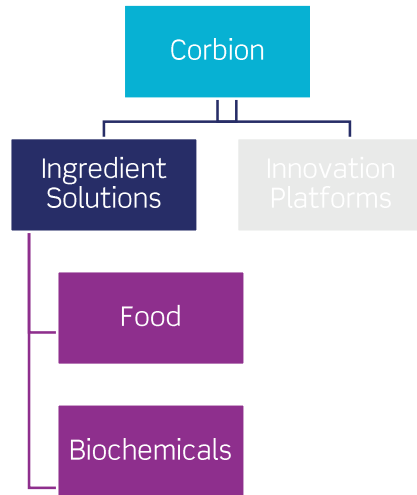




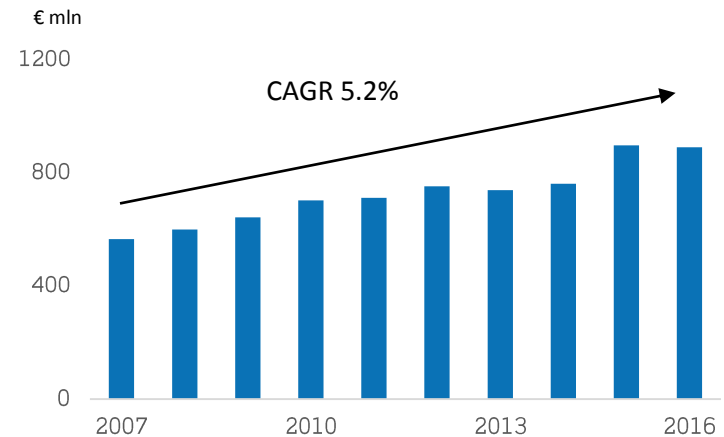
## INGREDIENT SOLUTIONS

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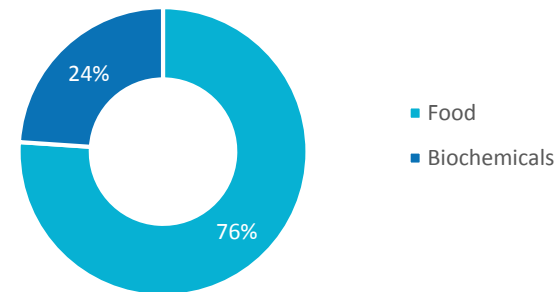
# Ingredient Solutions



## Net sales Ingredient Solutions segment

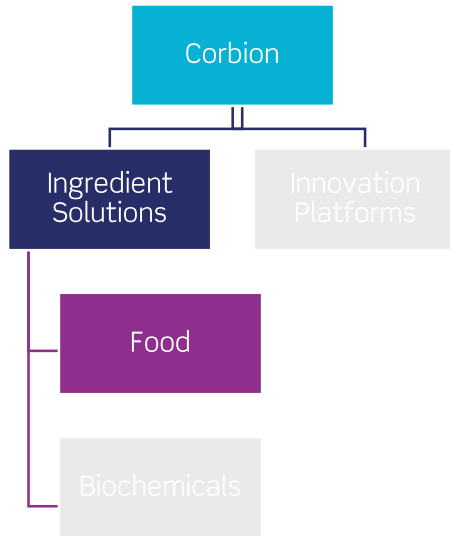


## Net sales Ingredient Solutions (2016)

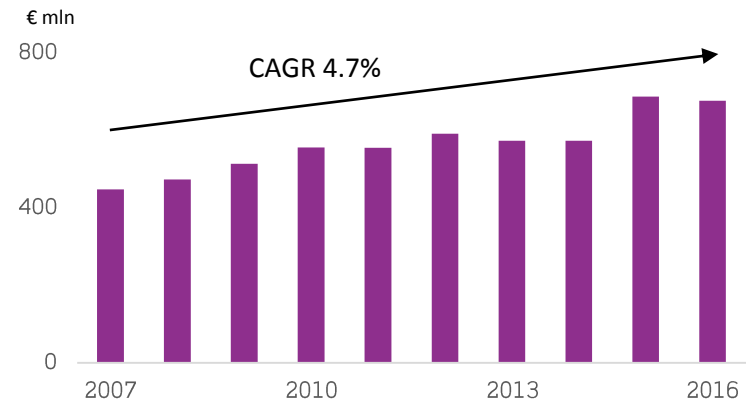


- High value ingredients
- Shared production platform – lactic acid & emulsifiers
- Serving multiple end markets: food & non food

# Ingredient Solutions - Food

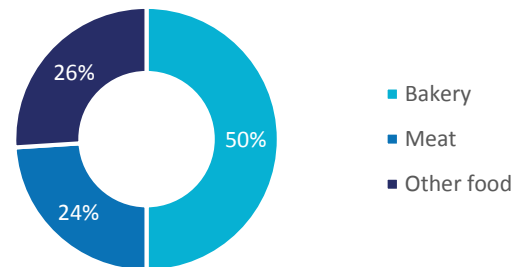


## Net sales Food segment



- North American market leader in Bakery ingredient-solutions
- Worldwide market leader in meat preservation/antimicrobials
- Leading positions in selected niches in confectionery, beverages

## Net sales Food (2016)



# The consumer conflict: Where dreams clash with reality



## Clean label vs Food Safety



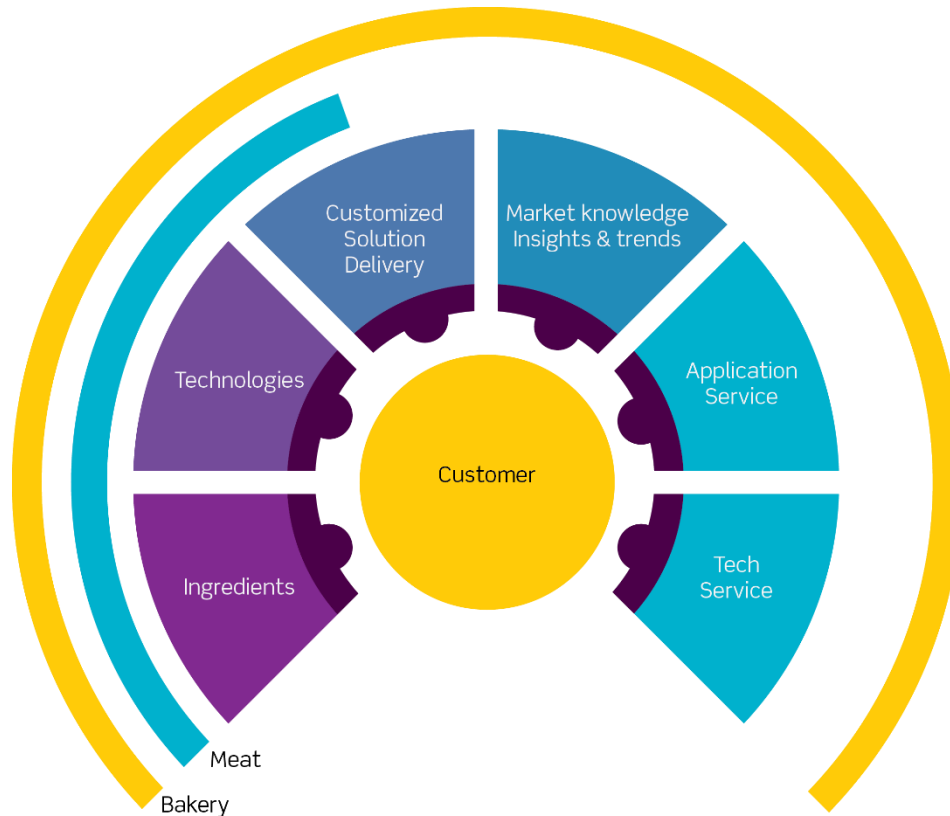
## Non-processed vs convenience



## Healthy vs affordability



# How does Corbion help its customers with these dilemmas



- **Consumer insight** - what is driving the customers of our customers?
- **Application and Tech Service Capability** - facilitate rapid implementation of our solutions together with our customers
- **Conscious choices** - in our co-creation with customers we want to be transparent about available solutions



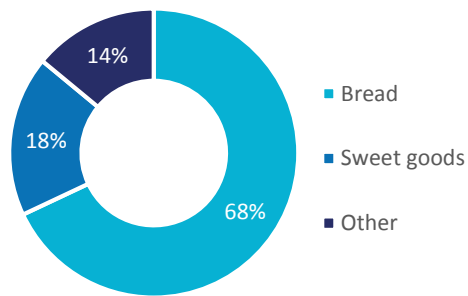
## BAKERY

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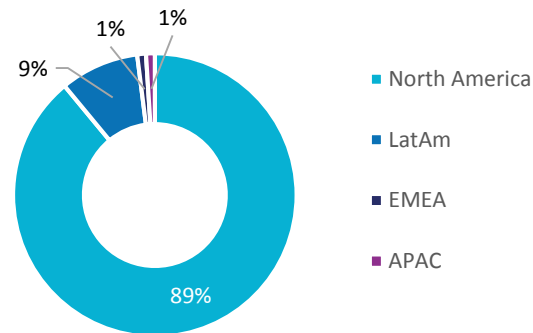
# Corbion Bakery at a glance

## Corbion Bakery by product



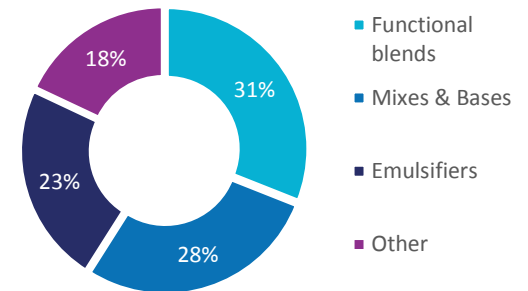
Source: Company data

## Corbion Bakery by geography



Source: Company data

## Corbion Bakery by product type

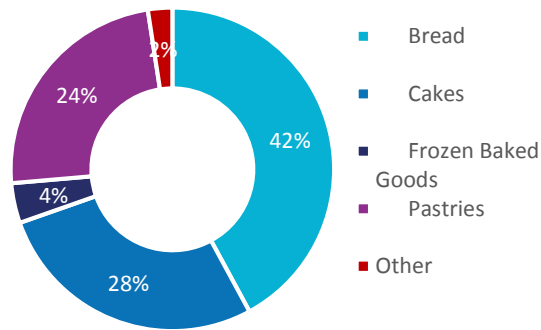


Source: Company data

- Market leading positions in Functional blends and Emulsifiers (25-30% share) in North America
- High exposure to Bread and Industrial/Wholesale channels

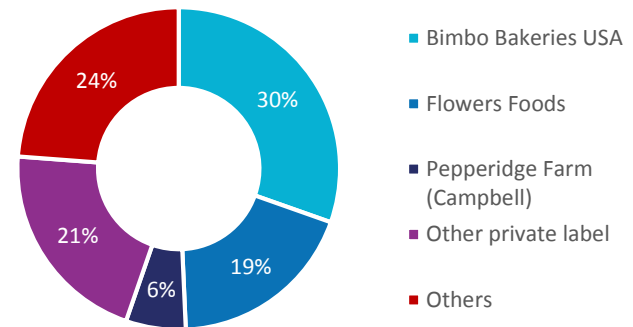
# North American bakery products market

**NAM Bakery market by product type**



Source: Euromonitor

**Brand share North America fresh & frozen bakery products**



Source: IRI, Flowers Foods 10K, 1/1/17

- North American bread market flat; growth in selected products/channels
- Number of large bakery product players decreased from 6 to 3 over last 10 years

# Bakery – North America market trends

## *Clean Label*

Consumers seeking labels shorter in length and utilize ingredients recognizable as something they may use at home



## *Shifting Purchase Behaviors*

Consumers can now purchase baked items in channels other than the traditional retailer (convenience store, online, corner pharmacy)



## *Healthy Living*

Healthy habits are becoming the norm as concerns about obesity, food sensitivities/allergies continue to rise



## *Less Skilled Labor*

Bakeries continue to struggle with product quality and consistency issues



## *Premiumization*

Consumers spending more on quality and indulgence. New flavors, and culturally influenced baked items are differentiators.



## *Regulatory Changes*

Regulatory changes are vast to keep up with rapidly changing market dynamics.



# Expand in sweet goods North America

## WHY

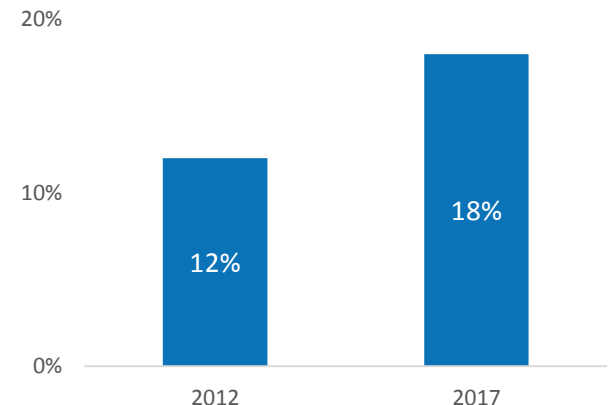
- Sweet goods is faster growing than bread
- Our penetration of addressable market is lower
- Changing market trends drive a need for our technology in the market
- Our differentiated freshness technology will enable us to gain market share

## HOW

- Higher R&D investments due to more complexity (ingredient list often 2x that of bread)
- Expanded emulsifier portfolio
- Expand customer relationship from just industrial to in-store and foodservice



**Sweet goods as % of Corbion Bakery sales**



# Expand in foodservice channel North America

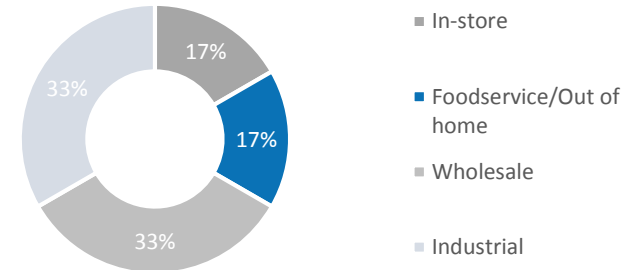
## WHY

- North American foodservice market (growing at 5% each year)
- Customer has come to expect more than “just convenience” – quality, experience, and taste rule
- Foodservice providers want less waste and better consistency with lower skilled workforces
- QSR’s want to know what ingredients go into their products and how to differentiate themselves

## HOW

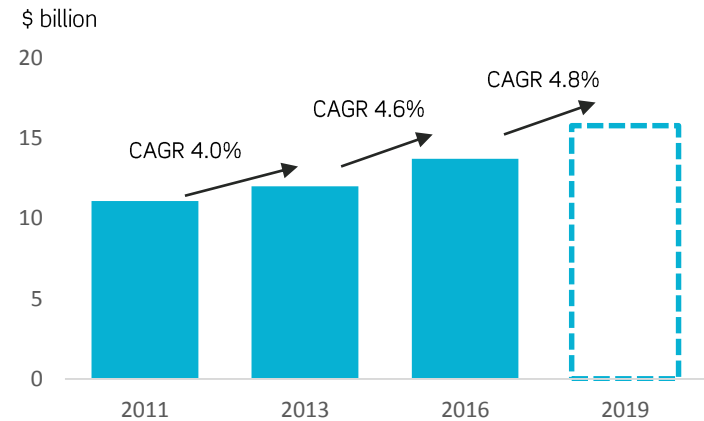
- Develop foodservice solutions for quality, consistent baked goods in easy to use formats
- Understand consumer preferences in order to support our customers and their customers

## Corbion Bakery by channel



Source: Company data

## US Foodservice Bakery Manufacturer Shipments



Source: Euromonitor

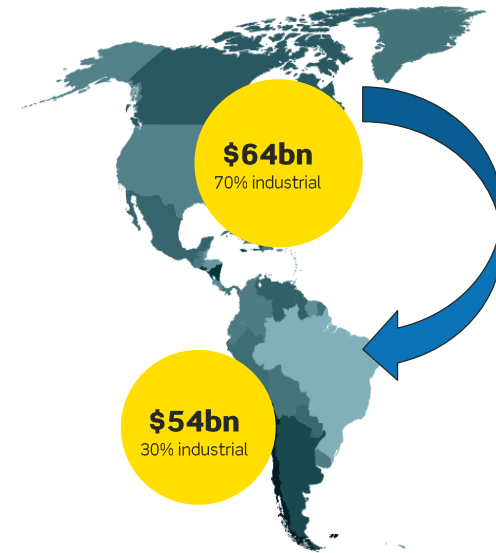
# Expand into Latin America

## WHY

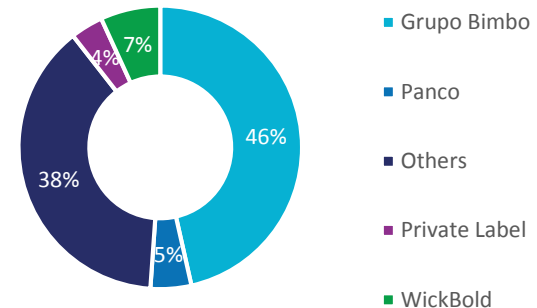
- Our customers continue to expand in LatAm
- We can leverage existing customer relationships
- Selected markets resemble North America
- Industry consolidation creates a shift from artisan to industrial bread
- Attractive demographic and market trends

## HOW

- Develop local blending capabilities
  - Increase local market knowledge
- Transfer NAM technology and apply it to LatAm market
- Supported by bolt-on M&A



**LatAm industrial baking market share**



Source: Euromonitor

# Cleaner label in bread

## Great Nine

*A traditional bread base*

Item #124631

*Ingredients:* Dextrose, Vegetable Shortening (Partially Hydrogenated Soybean, Cottonseed and/or Canola Oil), Salt, Sugar, Diacetyl Tartaric Acid Esters of Mono- and Diglycerides (DATEM), Soy Flour, Contains 2% or Less of: Mono- and Diglycerides, Potassium Bromate, Ascorbic Acid, L-Cysteine, Enzyme.

**Number of ingredients = 11**

## Pristine® Great Nine

*A clean label bread base*

Item# 134176

*Ingredients:* Sugar, Wheat Flour, Salt, Canola Oil, Enzymes and Ascorbic Acid.

**Number of ingredients = 6**

67%

of consumers

Indicate that the **type** of ingredient impacts purchase decision

47%

of consumers

Indicate that the **number** of ingredients impacts purchase decision

**Manufacturers are looking to deliver on cleaner labels in premium and super-premium items**

# Customer example



“Shipping posed the biggest challenge of all. [...] It was incredibly expensive (each route required a driver, a truck, gas and insurance), eating up 36% of revenue each year.”

“The magic bullet turned out to be chemistry. Metropoulos spent millions on R&D, working with food lab **Corbion** to tweak the formula of starches, oils and gums in Twinkies [...]”

*Source: Forbes, April 2015*





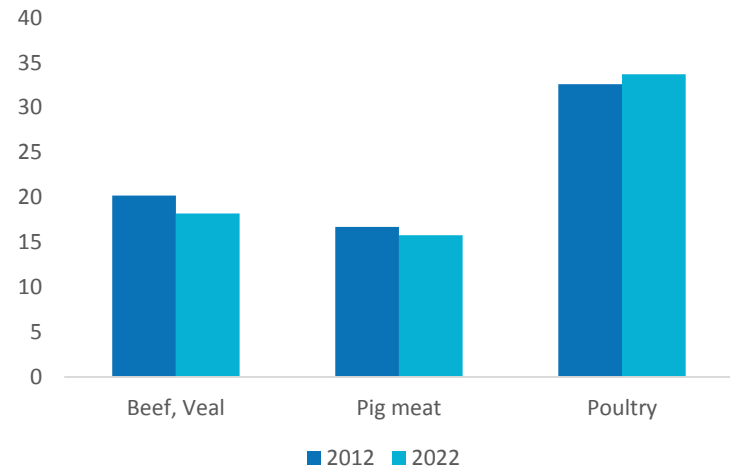
MEAT

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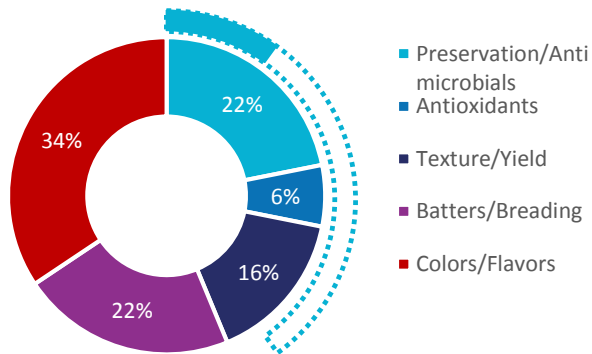
# Global market Meat ingredients

- Worldwide processed meat market is US\$ 600bn
- Specialty Meat ingredients market is US\$ 3bn

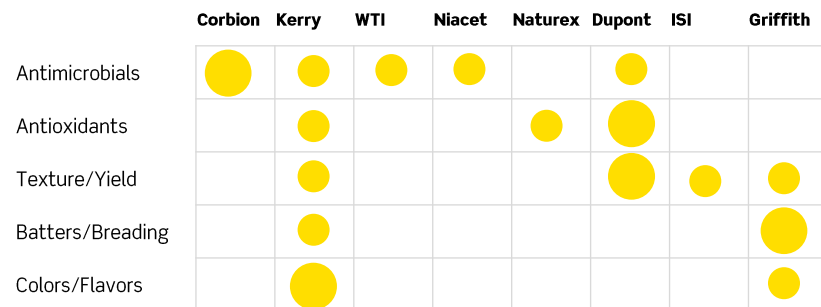
## US meat consumption per capita, kg



## Specialty ingredients in Meat



Source: Company estimates



# Market trends

- **From lowest cost production...**
  - Reduction of protein cost
  - Reduction of overhead cost (such as RD&A)
- **... to Better 4 U:** Consumers are moving towards 'better 4 U' solutions
- **but this provides dilemmas for the meat processor**

**Clean label vs Food Safety**

We want to remove all '-ates' from the list but we also want to guarantee food safety

**Non-processed vs convenience**

How can we make a chicken filet, fresh, never frozen, for foodservice channel that looks/feels homemade?

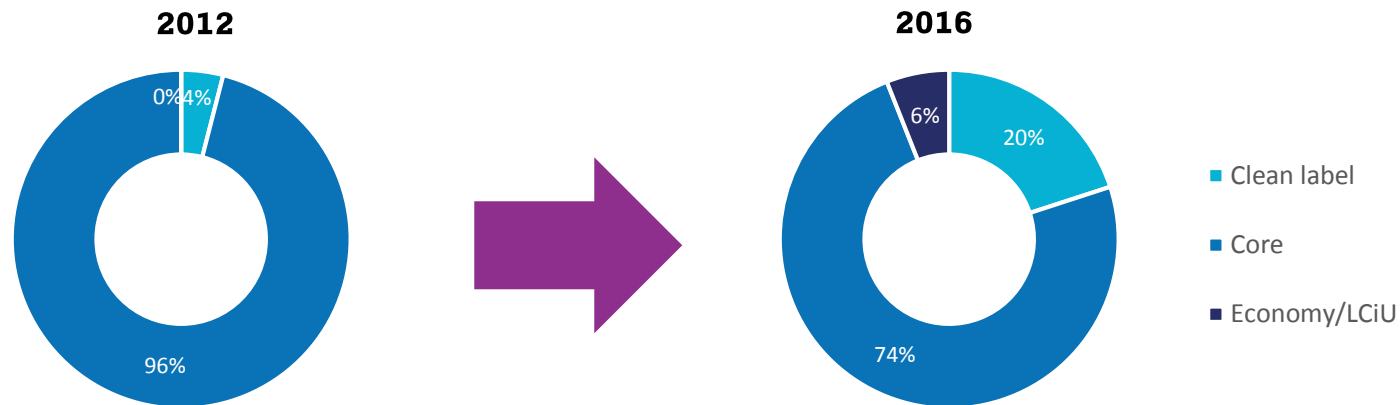
**Healthy vs affordability**

How can we create a healthy hotdog affordable for the masses?

**Corbion is well positioned to help meat processor customers overcome these dilemma's**

# Breakthrough of clean label solutions

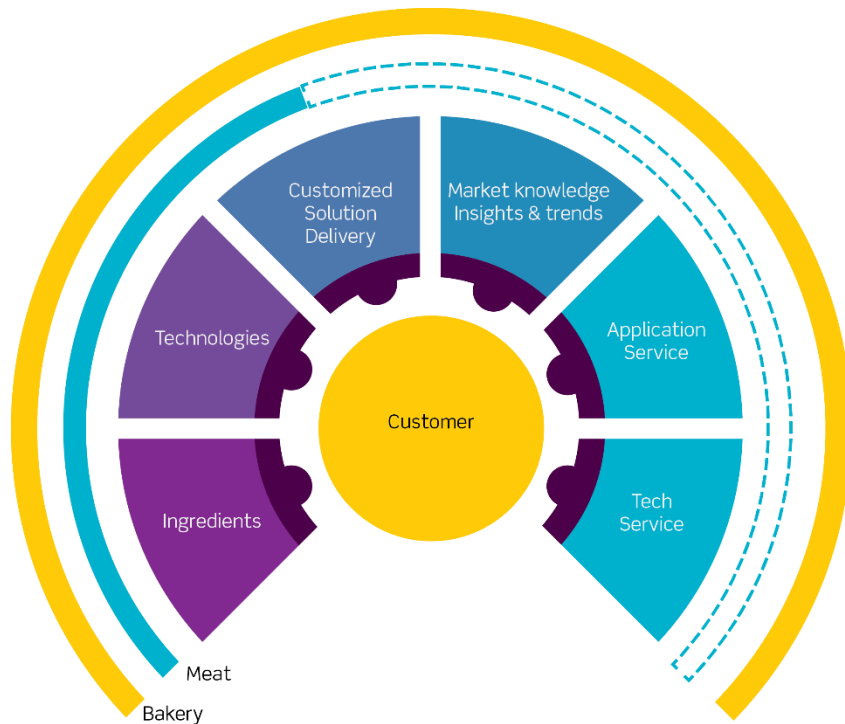
**Corbion meat revenue breakdown by product**



Source: Company data

- Clean label solutions have been driving our growth
- Clean label solutions have become major category in only 5 years. Rise of economy solutions halted in 2014

# From product to solution



## From mostly red meat market to above average growth markets

- Poultry
- Meat snacks
- Affordable meat

## Increasingly source external ingredients for these functionalities

- Anti-oxidation
- Yield enhancement
- Texturing

- Leveraging current position as trusted supplier of food safety and shelf life to help customers in conversions from standard to natural and clean label products
- Increasing our share of wallet in specialty meat ingredients from around 8-10% to 30- 50%

# Transforming low cost Hotdog into a “Better 4 U” item



## Ingredients

MECHANICALLY SEPARATED TURKEY, MECHANICALLY SEPARATED CHICKEN, PORK, WATER, CORN SYRUP, CONTAINS LESS THAN 2% OF SALT, SODIUM PHOSPHATES, **SODIUM DIACETATE**, **SODIUM BENZOATE**, **SODIUM ASCORBATE**, FLAVOR, **SODIUM NITRITE**

## Nutrition

Serving Size 1 link (45g)

### AMOUNT PER SERVING

Calories	110 CAL
Calories From Fat	90 CAL

### % Daily Value

Total Fat	10 G
Saturated Fat	3 G

Cholesterol	35 MG
Sodium	420 MG
Total Carbohydrates	1 G
Dietary Fiber	0 G
Sugars	1 G

Protein	5 G
---------	-----

Vitamin A	0.00
Vitamin C	8.00
Calcium	6.00
Iron	4.00

## Ingredients

MECHANICALLY SEPARATED TURKEY, MECHANICALLY SEPARATED CHICKEN, PORK, WATER, **CULTURED DEXTROSE\***, CONTAINS LESS THAN 2% OF DEXTROSE, SALT, CORN SYRUP, **DISTILLED WHITE VINEGAR\***, **CULTURED CELERY JUICE\***, SODIUM PHOSPHATE, **CHERRY POWDER**, FLAVOR.

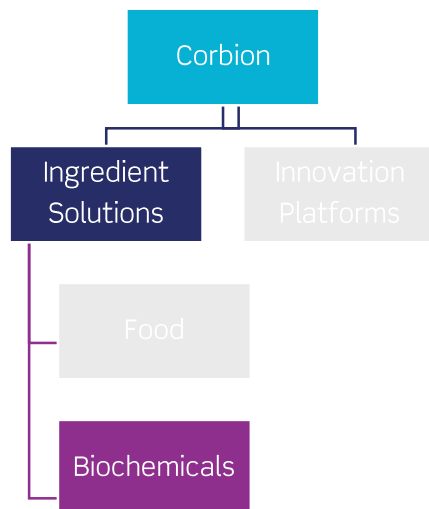
\* INGREDIENTS USED TO PRESERVE QUALITY.



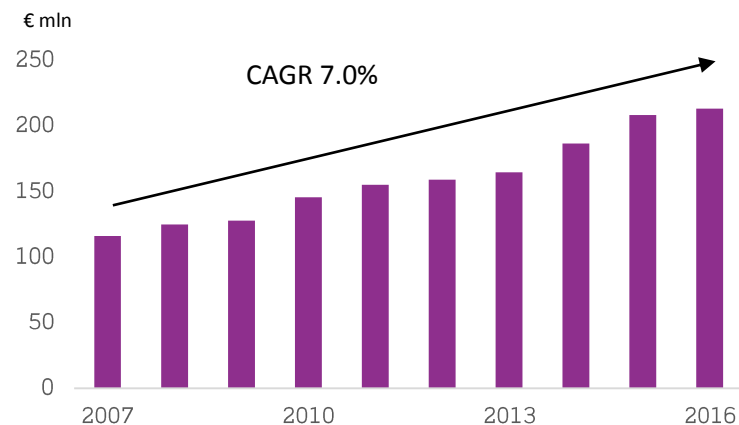
## BIOCHEMICALS

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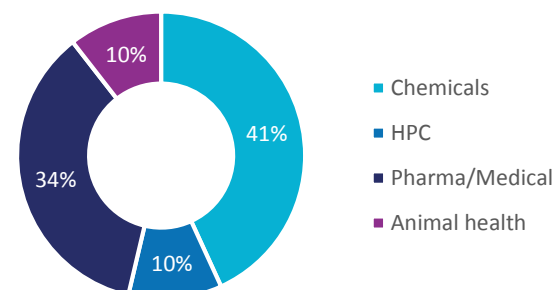
# Corbion Biochemicals at a glance



## Net sales Biochemicals segment



- Health and Safety drivers dominate growth in Biochemicals
- Growth in recent years driven by Medical/Pharma and Chemicals, offset by slower market growth in segments impacted by low oil price





# Biomedical – business update key innovations

## Strategic positioning

Independent partner in medical and pharmaceutical markets combining our expertise in **resorbable polymers** with expertise of partners in medical devices and pharmaceutical formulations

### Orthopedics

**FiberLive:** high strength resorbable composite

#### Technology update

Implemented state-of the art manufacturing line in Tucker, GA – USA

#### Business update

- Multiple co-development projects with top 10 medical device companies
- First FiberLive medical device has been submitted to FDA for approval. **Approval expected 1H 2018**

### Drug Delivery

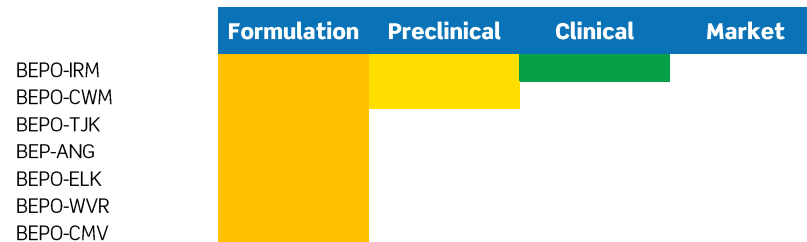
**Medincell:** cost efficient drug formulations

#### Technology update

Scaled up technology to commercial GMP manufacturing scale in Tucker, GA - USA

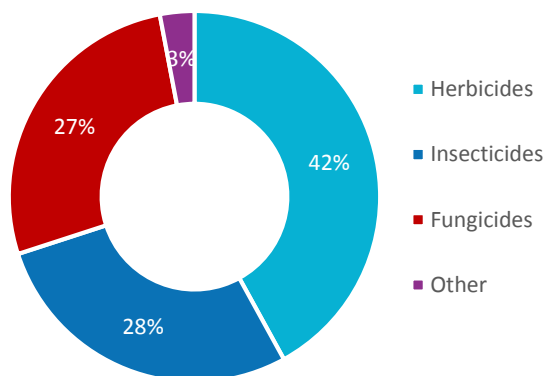
#### Business update

Project pipeline increased

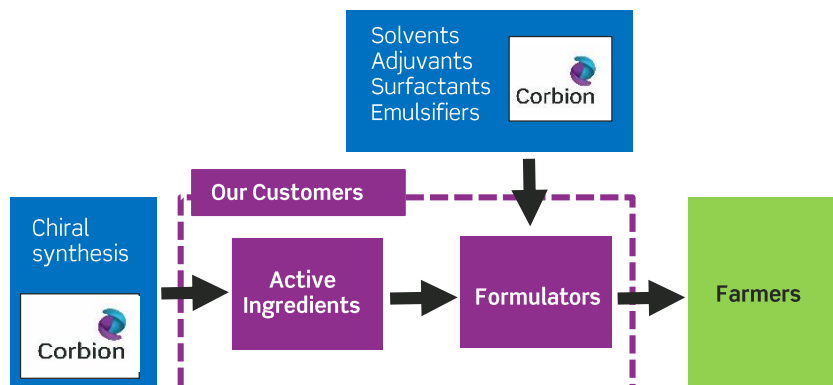
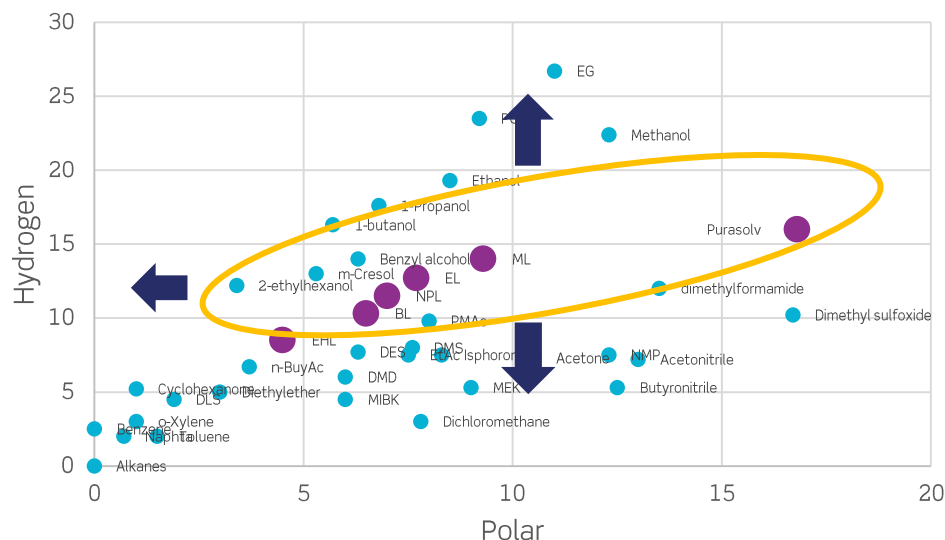


# Agrochemicals – crop protection

## Crop protection market (US\$ 50bn)



## Solubility range



## Strategy

- Grow attainable market
- Expand addressable market by developing desired new solvents, surfactants and emulsifiers
- Explore new applications within agrochemicals

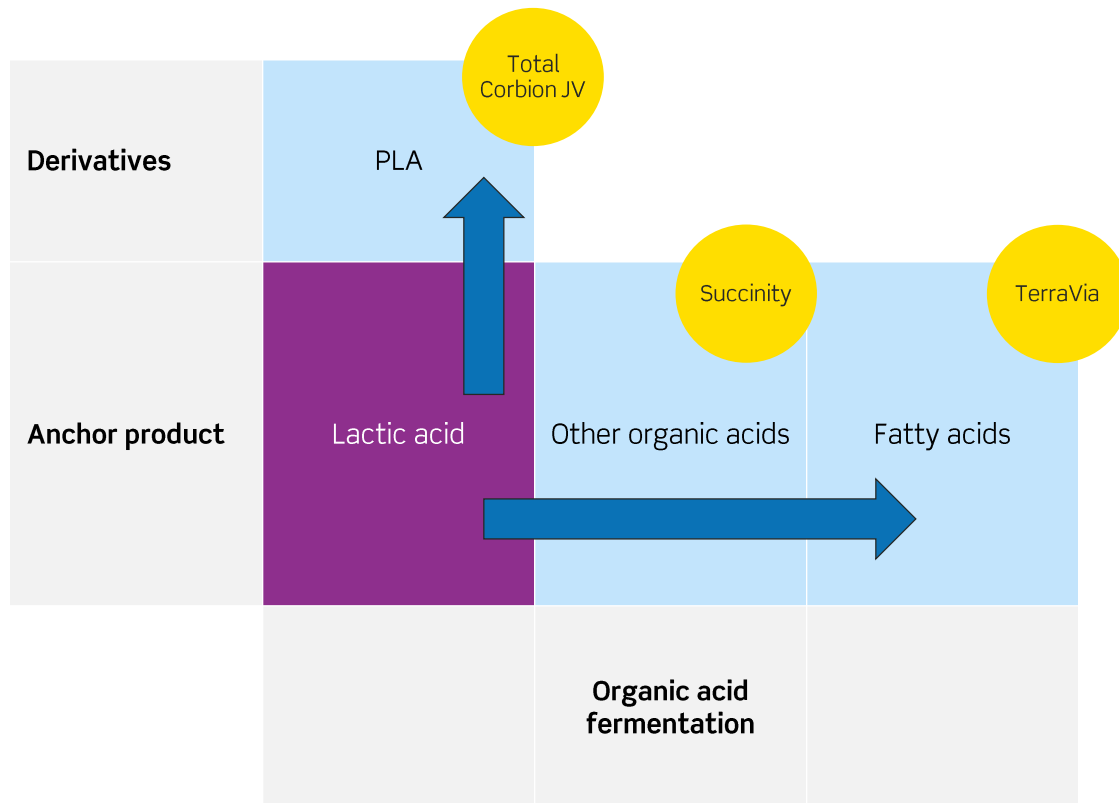


**Corbion**  
*Keep creating*

## **INNOVATION PLATFORMS**

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# Future growth in Innovation Platforms



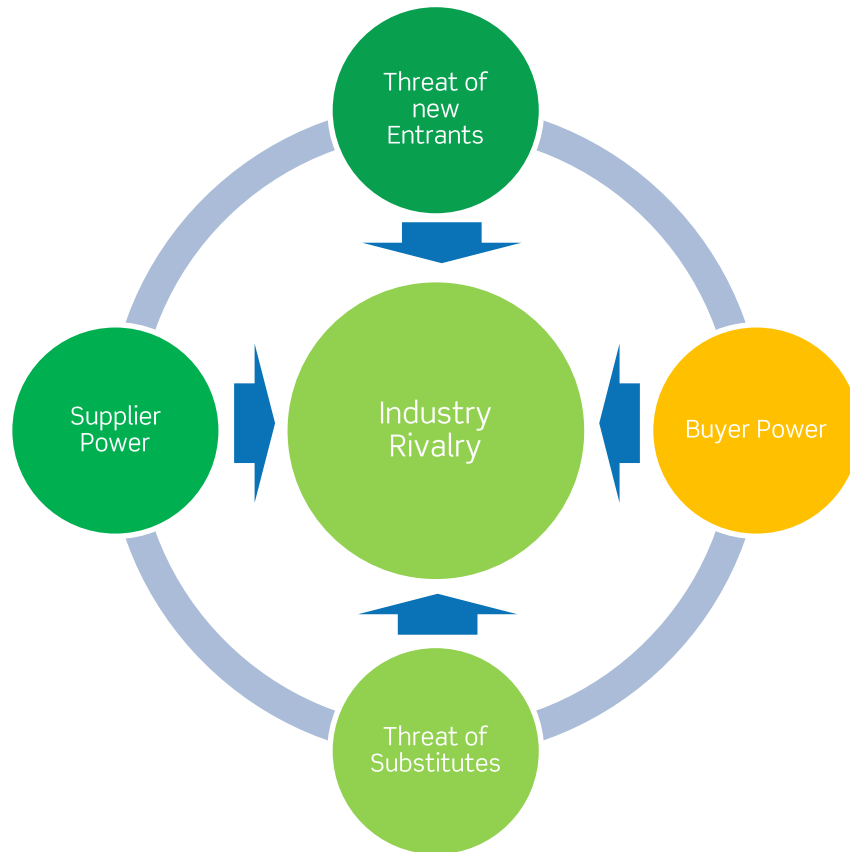
**Recent initiatives in PLA and Algae technology will provide meaningful contributions in coming years**

# Innovation Platforms at a glance

- Define new strategic value propositions with sizeable market potential
- Alignment with mega trends and Corbion's long term vision
- Building strategic partnerships to win in the market place
- Leveraging Corbion's feedstock, fermentation & Down Stream Processing capabilities

**All while applying disciplined stage-gate investment approach**

# Lactic acid: Corbion's anchor product



## Lactic acid market still attractive

- Driven by legislation/regulation changes
- Contributor to Food waste prevention
- (Food) Safety
- Favorable footprint compared to oil-based materials

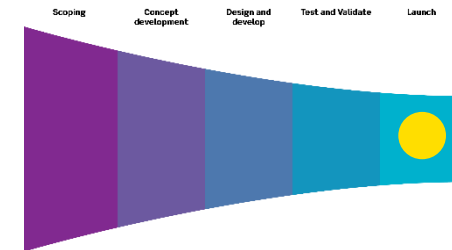
## New initiatives to enable further growth

- PLA, Bioplastics
- Gypsum-free
- 2G feedstocks

# Progressing our PLA journey



- 50/50 joint venture with Total
  - Construction on schedule and budget
  - Expected opening H2 2018
  - Pilot plant opening end of 2017
- 
- Securing further customer approvals
  - Supportive (EU) dynamics for bioplastics
  - New application development based on unique properties





# Construction PLA plant





# PLA – New applications

## Nonwoven tea bags & coffee pads

### Benefits

- Biobased
- Compostable
- High heat resistance
- Aroma neutral
- Soft & silky touch



## Thermoformed PLA tray

### Benefits

- High content of renewable resources
- GMO-free
- Biodegradable
- Heat resistant up to 135°C (depending on process conditions)



*Thermoformed PLA tray, heat resistant up to 135 °C, courtesy of FKUR*

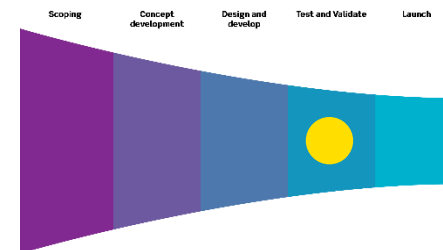


# Biobased Succinic acid (BBSA)

## PBS market development will determine success

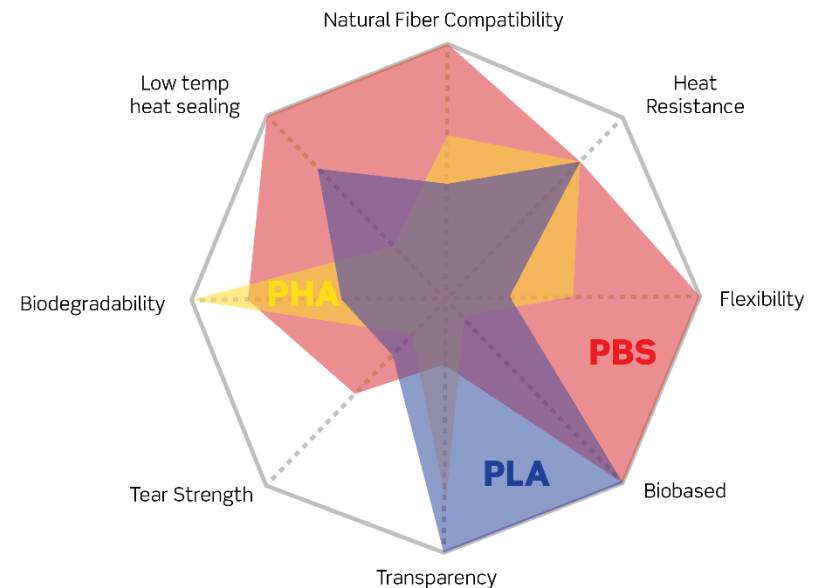


1. Partner with BASF – monitor progress market growth and application development biobased PBS by BASF
2. Optimize technology route to be ready for future production, condition to positive market development. Minimize current investment level in the mean time.



Corbion interests in success of BBSA

- Fermentation and down stream processing capabilities, including gypsum free technology
- Biobased building block complementary with PLA for biodegradable plastics



# FDCA: Partnerships are key to develop the value proposition

## Product and Polymer development and production

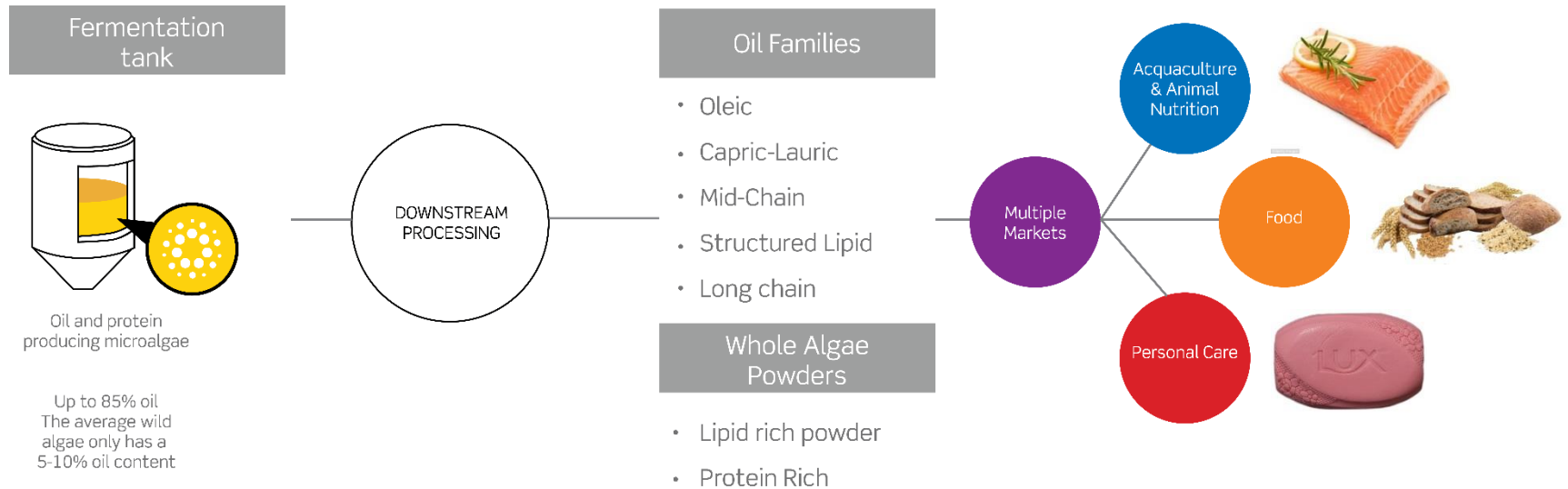
- Industry partners for PEF and other FDCA-based (co-) polymer production
- Working with leading manufacturers for selected other FDCA applications

## PEF applications in food and beverage packaging

- Collaboration to test & validate product performance in specialty bottles, as well to optimize use of FDCA on existing production lines
- Co-development of PEF based flexible packaging films for specific food applications with industry partners and universities



# Versatile algae product platform



# Current algae ingredient portfolio



## **Omega-3 DHA algae biomass**

New source of DHA, enabling sustainable growth of aquaculture



## **Specialty fatty acids**

Medium chain fatty acids from additional supply source besides palm



## **Functional fats and oils**

Saturated fat lowering solutions for a.o. bakery applications.  
Healthy culinary cooking oils



## **Whole algae proteins and lipids**

Functional lipid-powder and proteins - dairy free, non-GMO, plant based



**Corbion**  
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## **ALGAPRIME DHA**

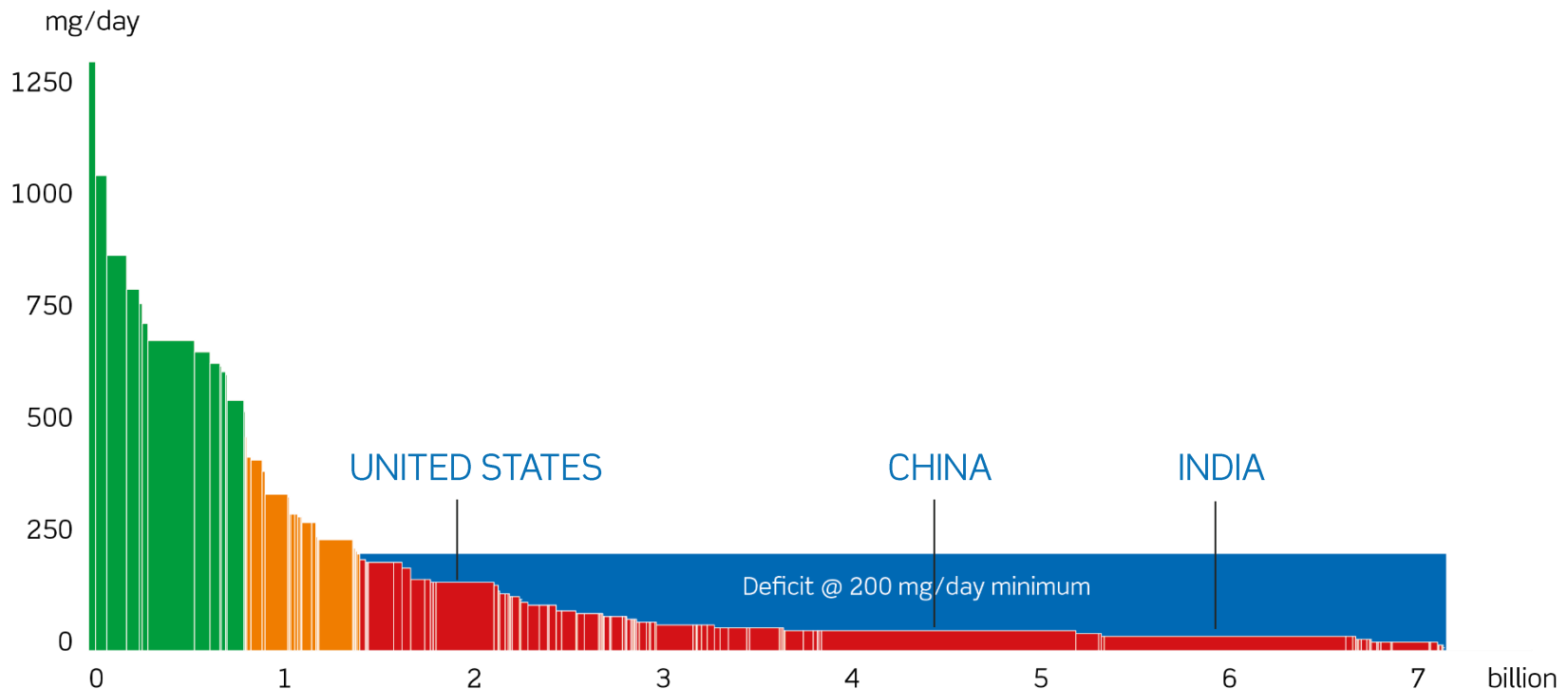
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# Marine Omega-3s are important at all stages of life



# Large segments of the population fail to meet health recommendation

## Population-Weighted EPA & DHA Intakes by Country



Source: Micha et al. BMJ. 2014 Apr 15;348:g2272.

**Over 6 billion people are below 200 mg/day minimum recommended intake**



# New sources for Omega-3s needed

The majority of health organizations recommend a minimum of 200 mg of marine omega-3s each day for healthy adults

200MG  
EACH DAY



DEMAND  
500 kT

With a growing population of seven billion people – demand for marine omega-3s is at an all time high

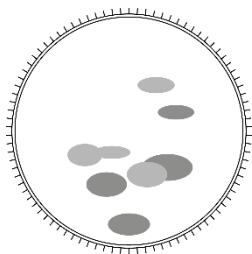
Global annual production of fish oil is limited to 1000kT with ~25% rich in marine omega-3s

SUPPLY  
250 kT



■ Omega-3s ■ Other FA

Fish Oil ~ 25% Ω-3



A deficit of marine omega-3 rich fish oil exists. We need new sources to bridge the gap.

# SB Oils joint venture

## WORLD'S LARGEST TRADER OF TRIGLYCERIDE OILS...



- Leading agribusiness
  - protein, carbohydrates & oils
- \$50B+ net sales; ~400 facilities
- 32,000 employees
- Largest vegetable oil business worldwide
- Global reach (40+ countries)

## ... MEETS THE WORLD'S LEADING ALGAE PLATFORM



- Microalgae biobased ingredients innovator
- Market leader in lactic acid and lactic acid derivatives, oils, proteins & polysaccharides from fermentation
- > € 900M revenues and >1,600 employees



2014 Presidential Green Chemistry Challenge Award Winner



George Washington Carver Award for Innovative Industrial Biotechnology

## TO FORM A DISRUPTIVE JOINT VENTURE

- Purpose built commercial plant > \$150 Million investment
- Five 625m<sup>3</sup> fermenters; ability to produce oils/biomass products
- Non genetically modified sugarcane feedstock
- Best in class environmental footprint & cost structure
- Currently producing AlgaPrime<sup>DHA</sup> at scale



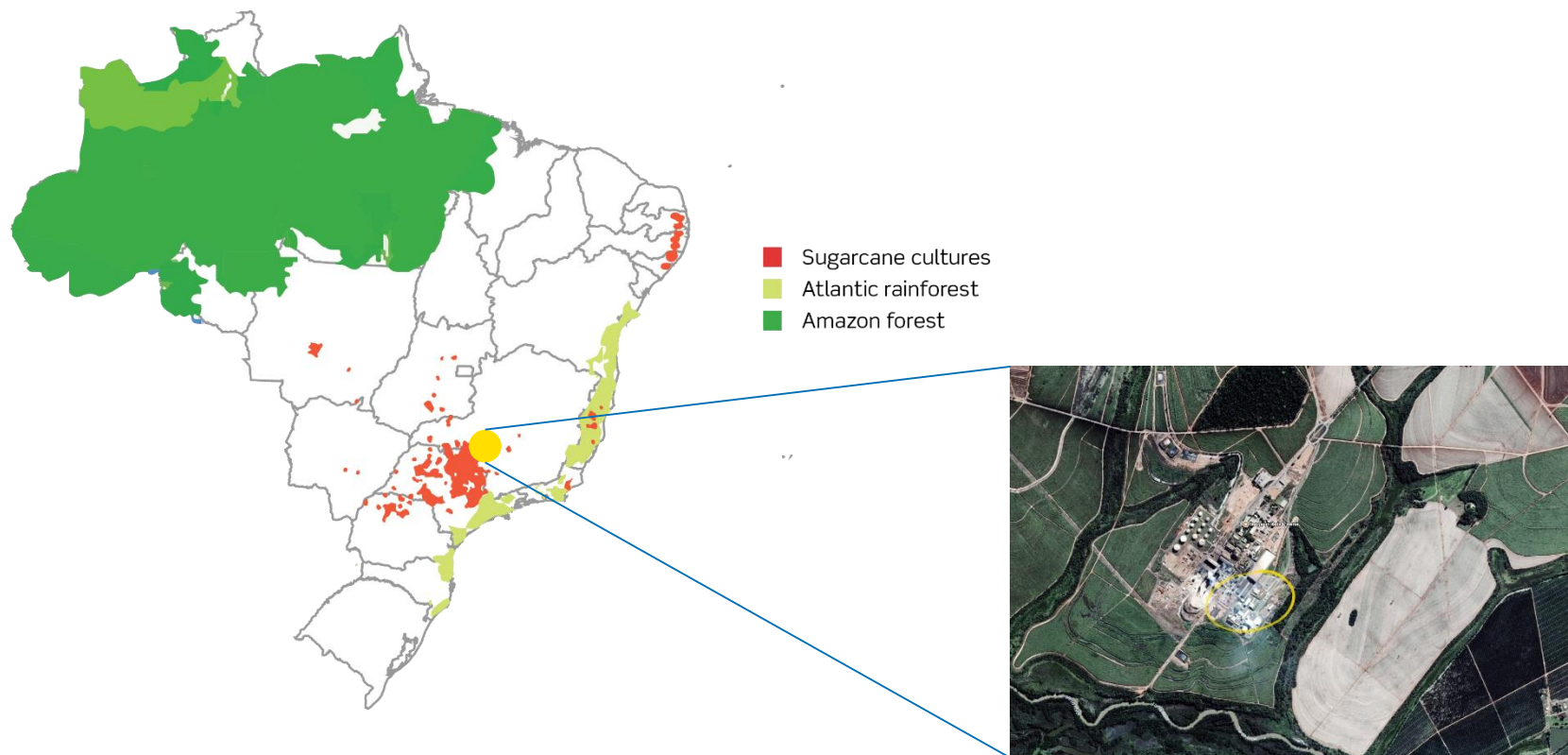
solazyme bunge  
PRODUTOS RENOVÁVEIS



2017 Global Aquaculture Innovation & Leadership Award Winner

# SB Oils joint venture production location

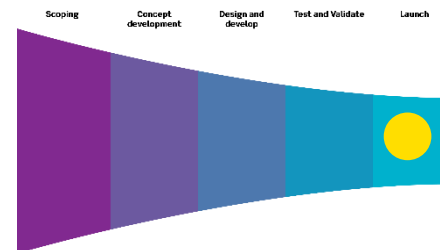
## SB Oils production location Brazil



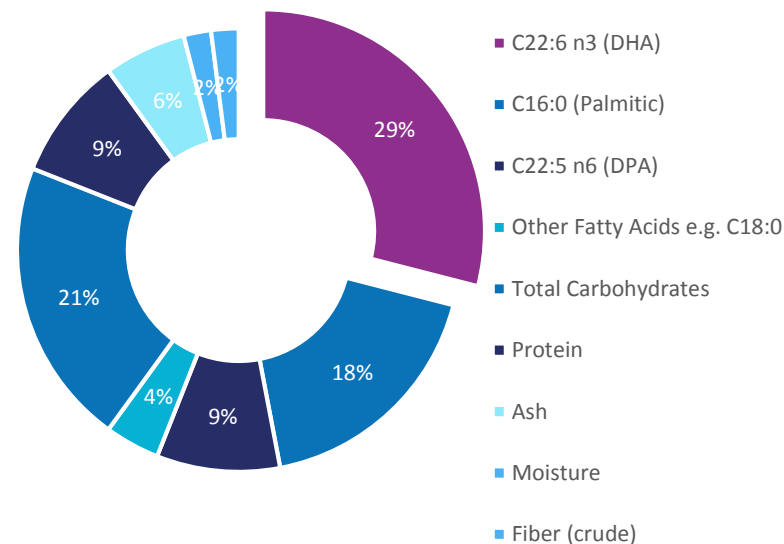
Located on the site of Bunge's Moema sugar mill; about 500km from São Paulo

# AlgaPrime DHA at a glance

- The original source of DHA: Whole algae ingredient from fermentation
- High levels of DHA (~30%): Provides flexibility to formulators
- Quality: Pure source of oil, rich in DHA
- Stable powder form: Easily incorporates into feed
- Available today: Fully formulated in salmon feeds



**AlgaPrime DHA content**



# Strategic partnership in aquaculture



BioMar is one of the top 3 players in the salmon industry

**Feeds one of every four farm raised salmon globally**

BioMar provides AlgaPrime DHA global reach in salmon farming



BioMar provides salmon feeds containing AlgaPrime DHA at scale today

## Market Leaders in salmon farming



Lerøy Seafood Announces Use of AlgaPrime™ DHA in Feed to Enhance Sustainability and Omega-3 Profile of Salmon

*Lerøy Seafood Group is the leading exporter of seafood from Norway and the world's second largest producer of Atlantic Salmon*



AlgaPrime™ DHA is now being used by a leading Chilean salmon farmer, Ventisqueros, S.A., to produce SilverSide™ Premium Pacific salmon at scale with unprecedented sustainability benefits

# Consumers surrounded by Omega-3 benefit messages

THE ECONOMIC TIMES

**Omega-3 fats are the 'wonder-nutrient' that every millennial must include their diet**

Medical Daily

Mediterranean Diet Benefits The Human Brain Thanks To Omega-3 Fatty Acids, Fruits And Vegetables



**Go Fish (At Least Twice a Week)**

**The American Heart Association recommends eating fish (particularly fatty fish) at least two times (two servings) a week.**

MEN'S FITNESS

“Omega 3s can not only speed your workout recovery, boost your gains, and help you hit new athletic goals, but are also necessary for cardiovascular, brain, joint, eye and skin health.”

# Global Salmon Consumer Study

Harris Poll received 11,000 responses from 4,700 consumers across 6 countries.

Consistently across consumers in all six countries, the following resonated the most:



#1



“Responsibly Farmed Salmon”



#2



“Meets Heart Healthy Claim”



#3



“Highest in Good Fat”

Source: 2017 Harris Poll commissioned by TerraVia Holdings, Inc., among 2,129 participants in the US, 1,061 participants in the UK, 1,111 participants in France, 1,094 participants in Germany, 1,012 participants in Brazil, and 1,240 participants in Japan. Participants are aged 18 and older. Respondents selected up to 5 out of 20 statements across 6 categories: Sustainability, Health, Traceability, Non-GMO, and Feed



# Responding to Industry Needs

New source of pure algae oil rich in DHA



Improve feed sustainability metrics (FIFO / FFDR<sub>fo</sub>)

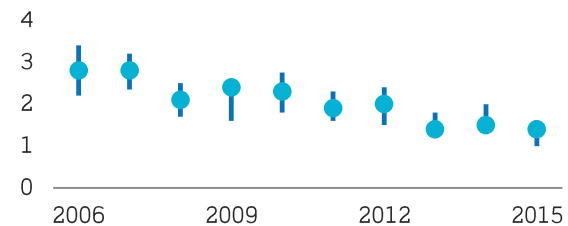


Creating new food choices



Responsibly increase total marine omega-3 levels

Omega-3 fatty acids in salmon (EPA+ DHA (g. 100 g- 1))





## FINANCIALS

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# Disciplined Value Creation – Financial target review

		Target 2014 - 2018	Status 2016	
<b>Ingredient Solutions</b>	Organic sales growth	2-4%	1.1%*	X
	EBITDA Margin improvement	>18% (by 2018)	19.8%	V
	Streamline savings	20M	20M	V
	ROCE	>15%	28.2%	V
<b>Innovation Platforms</b>	max. EBITDA loss p.a.	€ -14M	€ -6.4M	V
<b>Total Company</b>	Capex recurring p.a.	55M	Avg. 52M**	V
	Improve FCF	€ -7M (2014)	€ 72M (2016)	V
	Increase gearing (Net Debt/EBITDA)	-0.1x (2014)	0.9x (H1 2017)	V

\* CAGR 2014 - 2016

\*\* average 2014 - 2016

**All guidance targets have been met ahead of schedule, except for organic top-line growth**

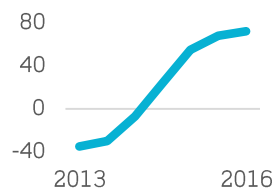
# € 296M cash returned to shareholders

**Operating cash flow**  
€300 million

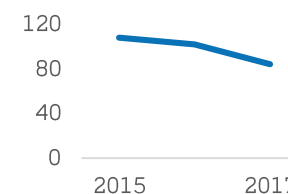
**Investment cash flow** €180 million

**Free cash flow** €120 million

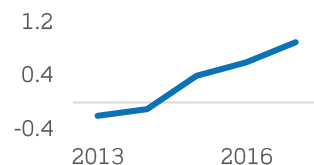
**Free cash flow (€M)**



**Dividend + SBB (€M)**



**Net debt/EBITDA**



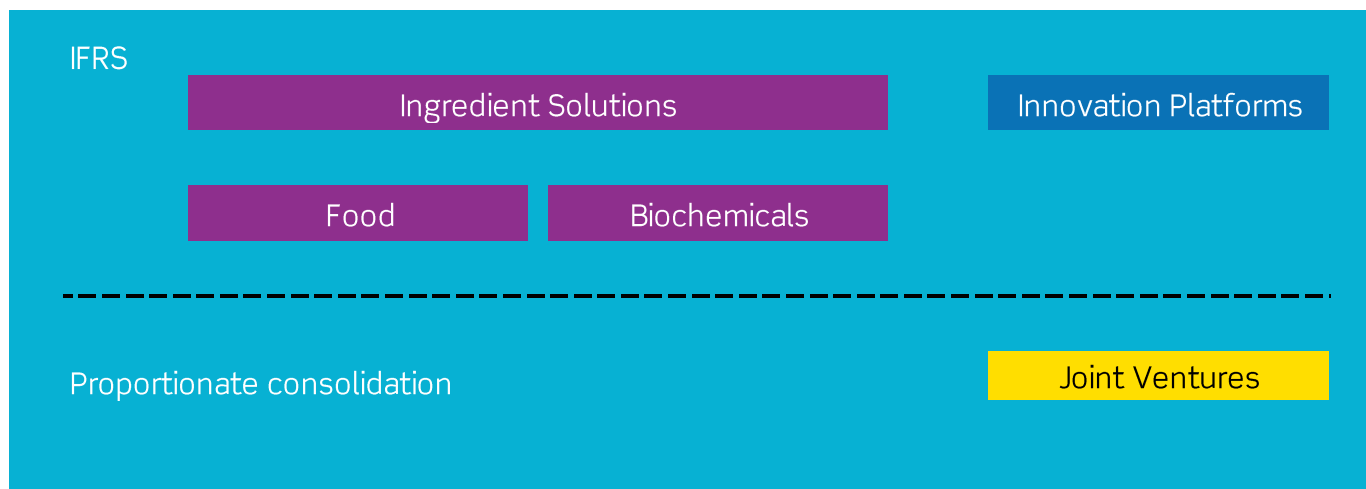
**Change in Net Debt** €176 million

**Shareholders** €296 million

**Share buy-back** €125 million

**Dividend** €171 million

# Reporting changes



- **Proportionate Consolidated figures in addition to IFRS reporting (for Innovation Platforms)**
  - **IFRS:** JV results reported on after tax basis; not included in reported Sales and EBITDA
  - **Proportionate consolidation:** In addition to IFRS sales and EBITDA, disclosure of proportionately consolidated JV sales and EBITDA
- **Central costs reallocated to Ingredient Solutions segments**
- **Changes implemented from Q4 2017**

# Updated Guidance - Growth and margin ambitions raised

**	Ingredient Solutions	Innovation Platforms*	Total*
Accounting	IFRS	Proportionate consolidation	
Net sales growth p.a.	2-4%	10-30%	3-6%
- Food	1-3%		
- Biochemicals	3-10%		
EBITDA	>19% margin	Approaching break-even in 2021 Max. loss of EUR € -35M p.a. (2018/2019)	
Capex recurring p.a.	€ 40M (€ 25M maintenance + € 15M expansion)	€ 20-30M (incl. JV investments)	€ 60-70M
ROCE	>20%		

\* Total Corbion IFRS reported figures + proportionate consolidation of Innovation Platforms JVs

\*\* all guidance at assumed USD/EUR 1.17

# Margin Drivers for Ingredient Solutions

## Portfolio Mix Improvement

Above average growth of higher margin business:

- Biochemicals > Food
- Specialty, Clean label > Standard

## Bakery/Meat Solution model

- Above Market growth rates
- Margins Solutions > Single ingredients

## Increased investments for growth

- Increased R&D (incl Application)
- Increased Expansion Capex

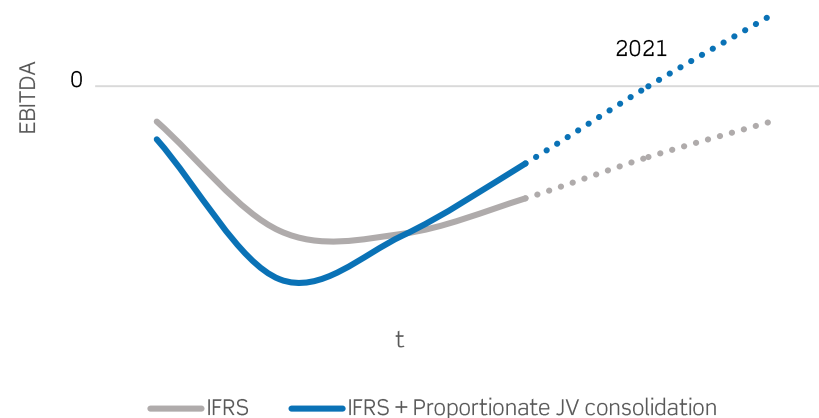
## Drive Efficiency

- Manufacturing Excellence
- New SAP ERP platform
  - Cumulative cash costs 30M (2018-2020)
- Annual savings 10M (2021)

# Innovation Platforms

	IFRS	Proportionate consolidation
<b>Revenues</b>	PLA-related lactic acid	Total Corbion
	Algae ingredients US	SB Oils
		Succinity
<b>Costs</b>	Production costs	JV costs
	R&D + S,G & A	

EBITDA Innovation Platforms

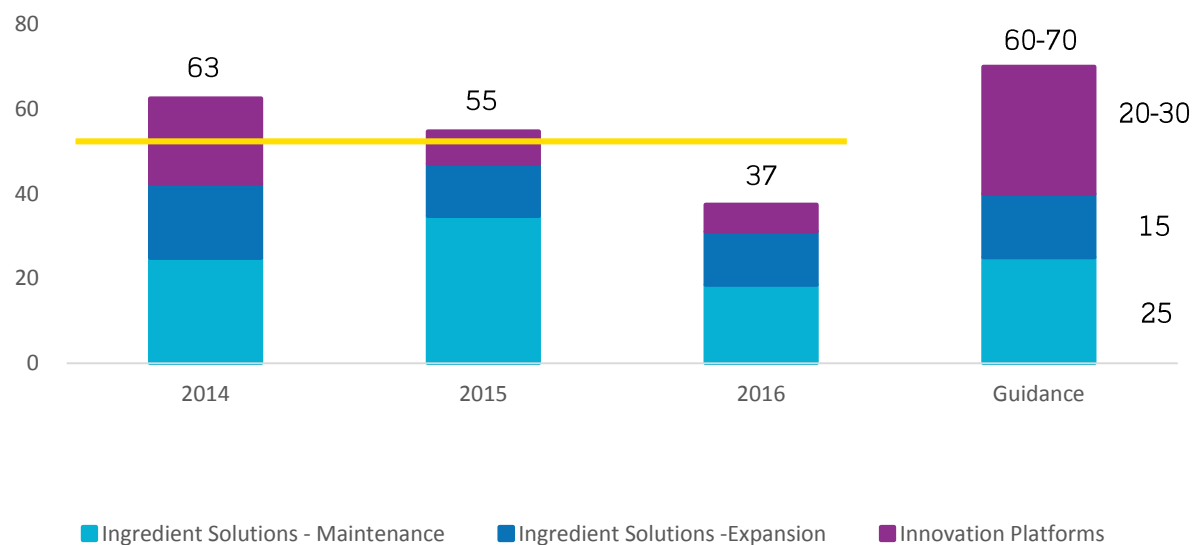


- Negative EBITDA in earlier years due to ramp up phase of main industrial scale plants (PLA, Omega 3)
- Approaching EBITDA (proportionate consolidation) break-even around 2021



# Capital Expenditures

## Recurring capital expenditure



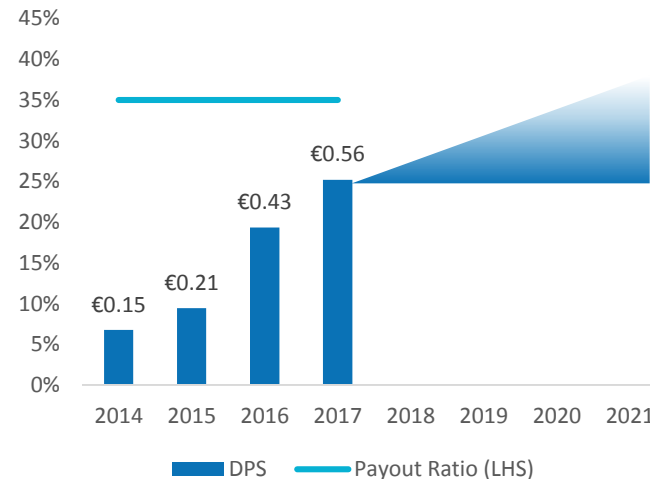
- Non-recurring capex 2014 – 2016: € 20M
- Maintenance capex guidance unchanged
- Expansion capex guidance raised
- Recurring capex guidance raised from € 55M to € 60-70M\*

\* incl. proportionate joint venture capex

# Progressive dividend policy

## Regular dividend

- Ambition to pay out annually a **stable to gradually increasing** absolute dividend amount per share
- As a consequence, the payout ratio is an outcome
  - Payout ratio expected to be in range of 35 – 65% (was 35 – 45%) of the net profit adjusted for one-off items
- All cash
- Periodically, we will review our debt position in relation to our investment plans, and decide upon potential further returns to shareholders (via cash dividend and/or share buybacks)



# Creating Sustainable Growth

## Strategic levers for success

### Invest to Grow

- Increased R&D intensity

### Fund to invest

- Operating excellence initiatives
- Portfolio mix improvements

## Driving for Growth

### Ingredient solutions

- Bakery: LatAm expansion, strengthen US
- Meat: From product to solution
- Biochemicals: Biomedical innovations

### Innovation platforms

- PLA
- Omega-3/DHA
- Develop other organic acids

## Disciplined capital allocation

- Increased investments for growth
- Net debt/EBITDA of 1.5x over cycle
- Selective bolt-on acquisitions
- Progressive regular cash dividend

# Our vision for 2021

Be a collaborative innovator of sustainable ingredient solutions



> 10% of Corbion Net sales from Innovation Platforms



Having started construction of gypsum-free lactic acid plant





Corbion

*Keep creating*