



Corbion
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ADVANCE 2025 UPDATE

Capital Markets Day 2022

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Today's objectives

- **Advance 2025 update**
 - **Growth opportunities and strategic approach**
 - **Financial outlook**
- **Meet our team**



Agenda

10:00 – 10:05 Introduction

10:05 – 10:50 Olivier Rigaud

10:50 – 11:20 Eddy van Rhede van der Kloot

11.20 – 11.45 Q&A Board of Management

11.45 – 12.30 Lunch

12.30 – 14.00 Carousel (4 x 20 mins)

14.00 – 14.50 Q&A Executive Committee

14.50 – 15.00 CEO Round-up

Today's presentation team



Olivier Rigaud
CEO Corbion



**Eddy van Rhede
van der Kloot**
CFO Corbion



Carousels

Sustainable Food Solutions



Andy Muller
President SFS



Olivier Rigaud
CEO



David Charest
SVP Business Industry SFS



Jennifer Lindsey
CMDO

Lactic Acid & Specialties



Marco Bootz
President LAS



**Eddy van Rhede
van der Kloot**
CFO



Thomas Philipon
CEO TotalEnergies
Corbion



Carousels

Algae Ingredients



Ruud Peerbooms
President AI



Aurélie Dalbiez
CHRO



Tim Rutten
Sr. Dr. Commerce AI

Innovation



Marcel Wubbolts
CSSO



**Jacqueline van
Lemmen**
COO



Diana Visser
Sr. Dr Sustainability



Menno Lammers
VP Biomaterials



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STRATEGY UPDATE

OLIVIER RIGAUD

Our purpose

Preserve what matters



We champion preservation in all its forms

Portfolio aligned to SDGs



2 ZERO HUNGER



We help preserve
> 8 million tons of
food globally

AlgaPrime DHA
enables sustainable
aquaculture growth
to **feed 10 billion**
people by 2050

3 GOOD HEALTH AND WELL-BEING



Our **sustainable**
food ingredients
help control **food-**
borne pathogens.

Resorbable
orthopedic implants
reduce follow-up
surgery which
improves health care
affordability

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



New **circular lactic**
acid technology
with a **19% lower**
carbon footprint

Bioplastics
produced from
renewable resources
are key to **decouple**
plastics from fossil
feedstocks

Global biobased ingredients provider with unique technology platform

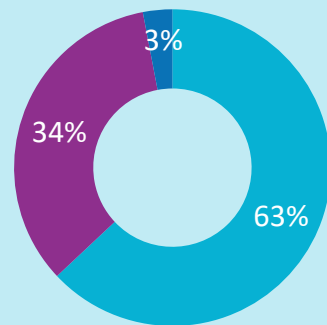
€1.1BN
net sales

€136M
Adjusted EBITDA

2,493
Employees

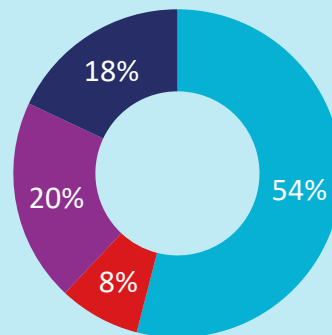
Key figures (2021)

NET SALES CORE

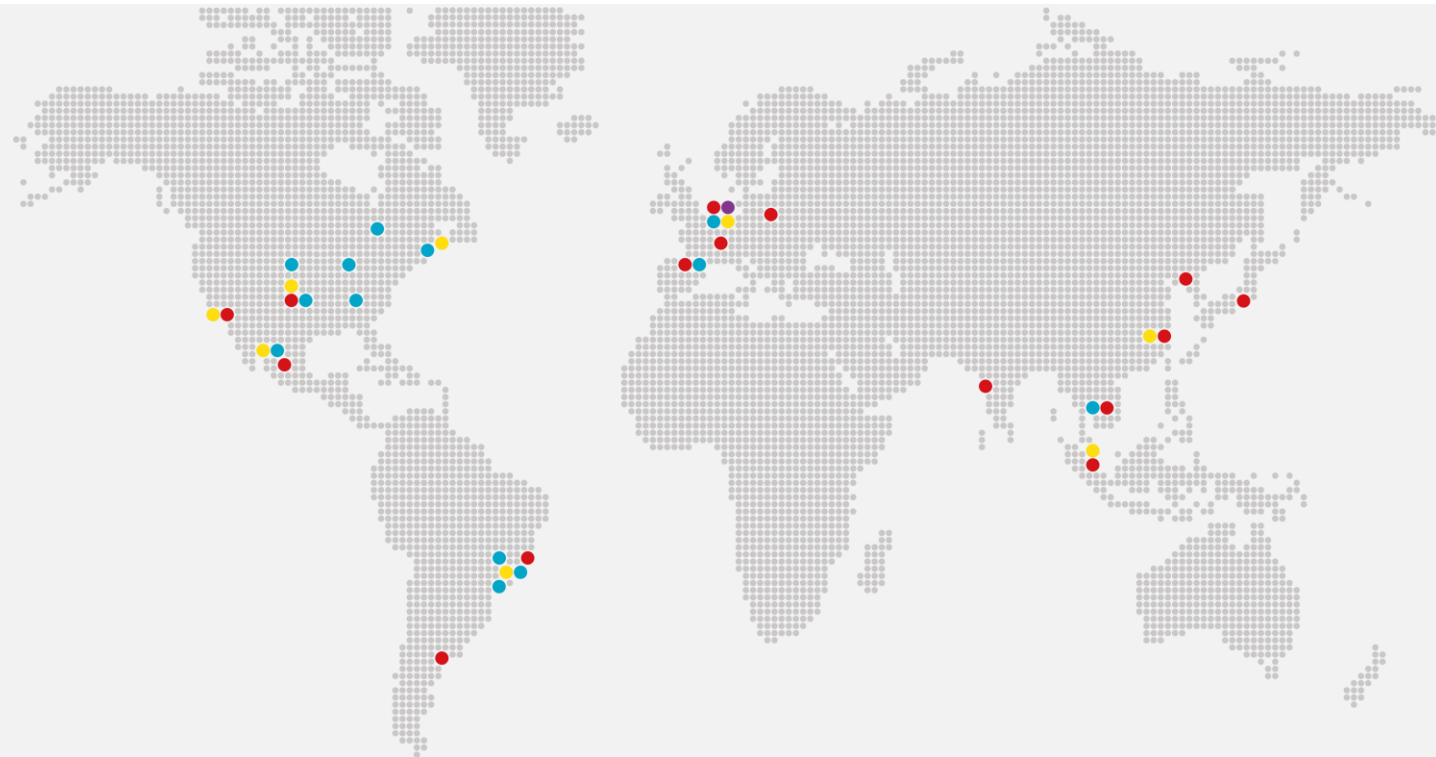


■ SFS ■ LA & S ■ Incubator

NET SALES PER REGION

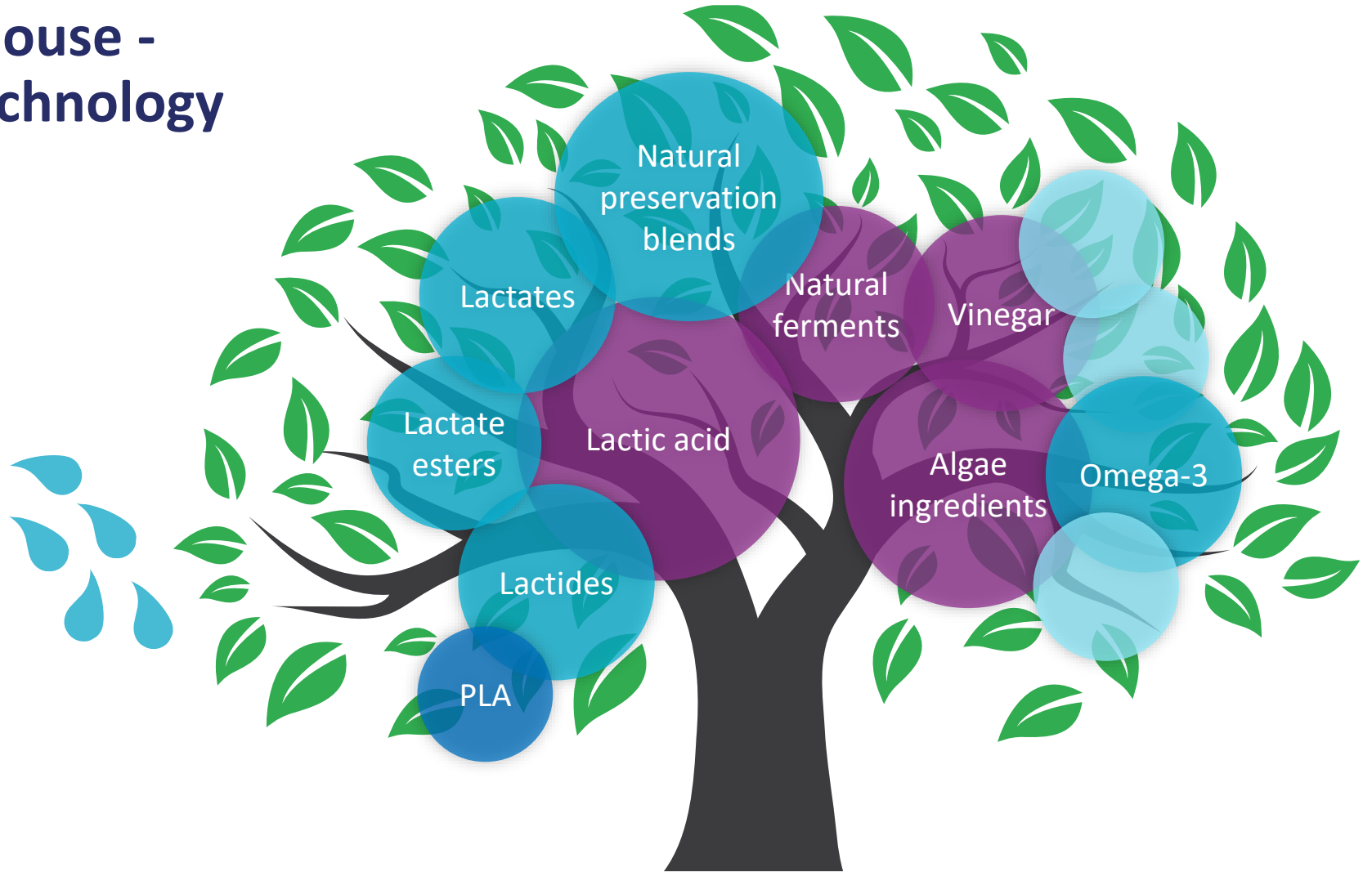


■ North America ■ Latin America ■ EMEA ■ Asia



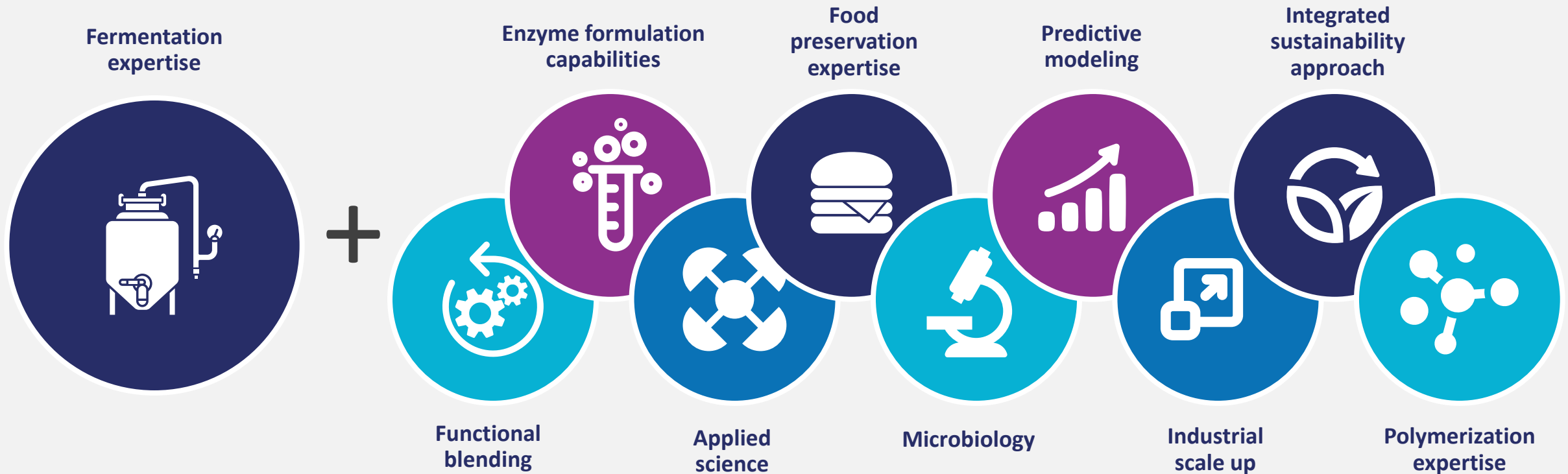
- Largest producer of lactic acid with global footprint
- Leading market positions in sustainable food solutions
- Unique technology platform: fermentation
- 13 manufacturing facilities, 8 innovation centers, and sales offices across the world

Fermentation powerhouse - our key production technology



Fermentation expertise

Corbion ecosystem built around fermentation



CMD PRESENTATION 2022

Advance 2025 Update



Key highlights

Significant progress made in delivering 'Advance 2025'

**Increase net sales growth target '23-'25 to 5-8% p.a.
(up from 4-7%)***

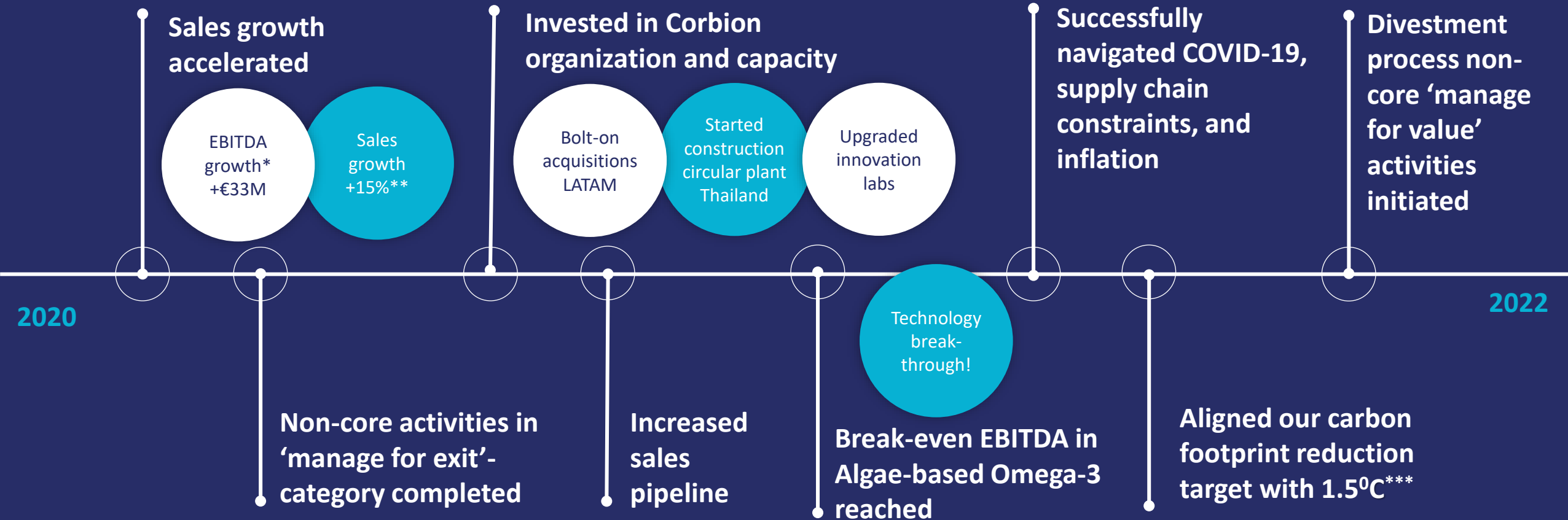
Adjusted EBITDA growth target '23-'25 of 15-20% p.a.*

Divestment process non-core emulsifiers business initiated

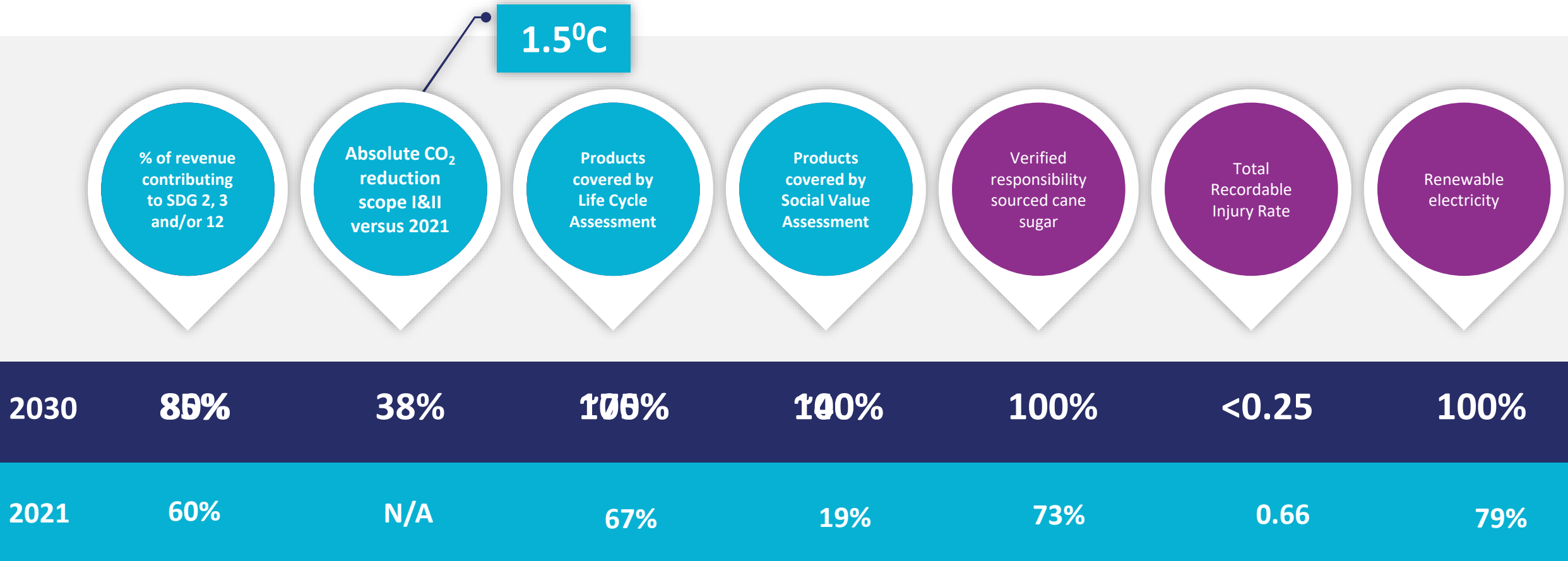
Creation of Algae Ingredients as a new reporting segment

**Actively managing down funding ratio < 2.9x in 2023,
and 1.5-2.5x as from 2024**

Good progress made on Advance 2025 Strategic Plan



Raising the bar in sustainability



United Nations
Global Compact



SCIENCE
BASED
TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE



Key drivers of value creation going forward



SUSTAINABLE FOOD SOLUTIONS

Global supplier of food ingredient solutions for the world's leading food manufacturers

- Expansion into product/market adjacencies
- Geographical expansion in Europe and Asia



LACTIC ACID & SPECIALTIES

Global leader in lactic acid and its derivative solutions covering biochemicals, medical biomaterials and bioplastics applications

- Circular lactic acid plant Thailand
- Lactic acid to PLA
- Medical biopolymers
- Derivatives in niche applications



ALGAE INGREDIENTS

Global supplier of algae-based ingredients providing nutritional benefits for human and animal diets

- Omega-3 in aquaculture
- Omega-3 in nutrition
- Leveraging our algae strain library



INCUBATOR

Early stage initiatives having a positive impact on the Sustainable Development Goals

- Algae portfolio extension
- Biopolymers
- Natural preservation
- Circular raw materials
- Net zero

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Sustainable Food Solutions



Sustainable Food Solutions

Global supplier of food ingredient solutions for the world's leading food manufacturers

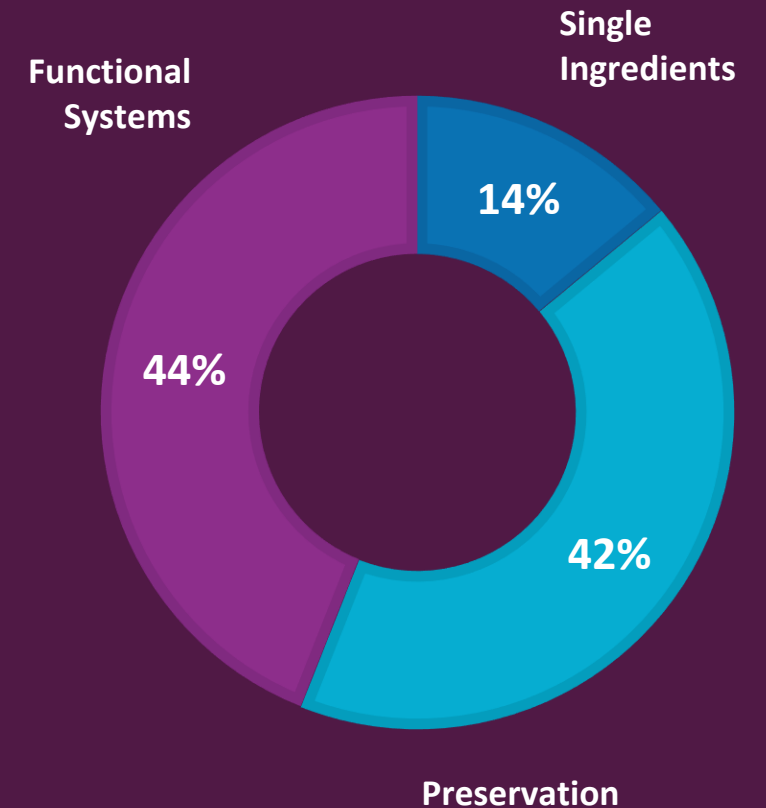
- Natural portfolio replacing synthetic ingredients with natural alternatives
- Keeping food fresh and safe for longer
- Deploying natural mechanisms and processes
- Customers in the bakery, meat, beverage, savory and dairy markets
- Minimising food waste and enhancing food safety

€584M*
net sales

63%
of core portfolio

13%
Sales growth
CAGR 20-22**

6%
volume/mix
CAGR 20-22**



Outperforming market growth while investing in new areas

Outperforming competition

- Market share gain in Bakery and Meat

Investments for growth

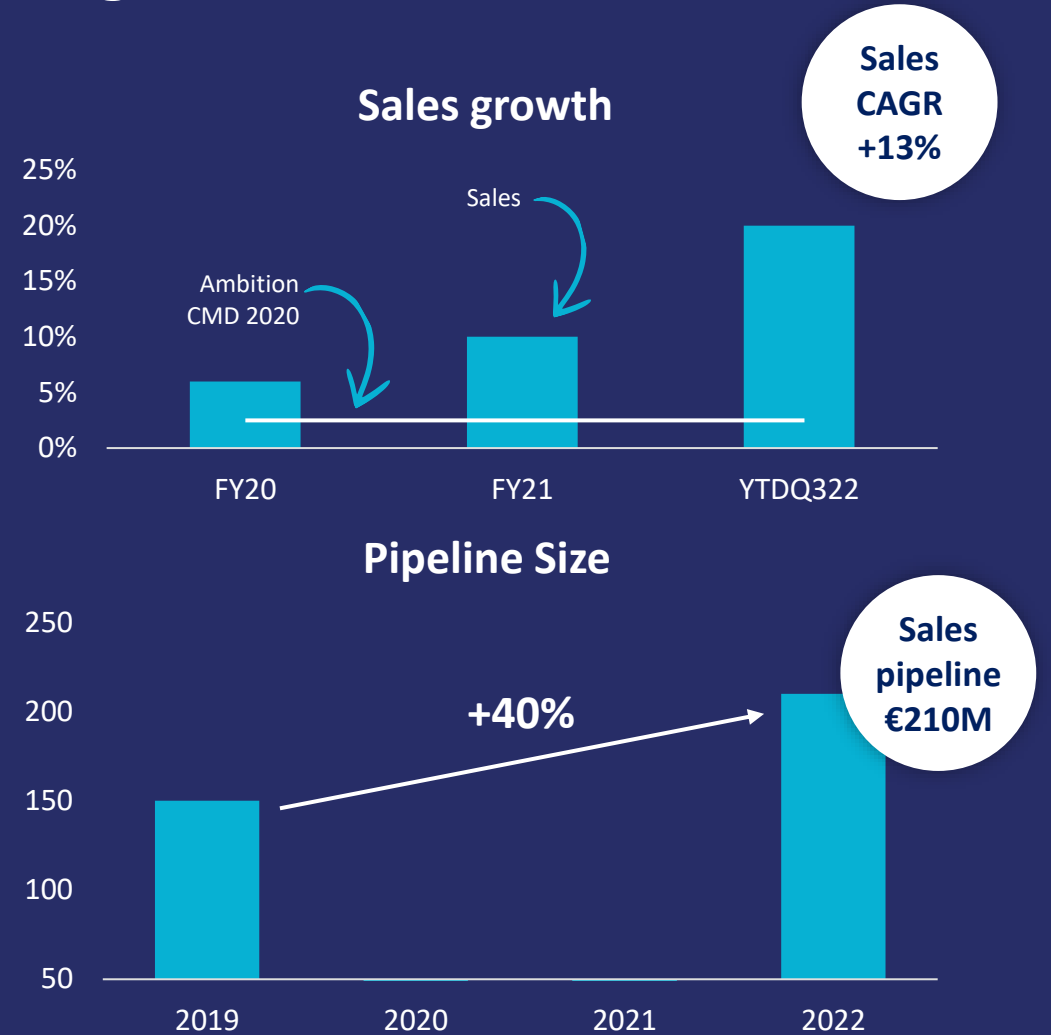
- New innovation centers
- Strengthening organizational capabilities

Extending geographical footprint

- Successful integration of Brazil and Mexico acquisitions

Expansion into product and market adjacencies

- Dairy stabilizers
- Natural antioxidants
- Natural mold inhibitors
- Natural ferments



Natural food preservation and functional systems growing 2x market rate

Corbion uniquely positioned to play in this space

Total addressable market

€8.5BN

Synthetic to natural

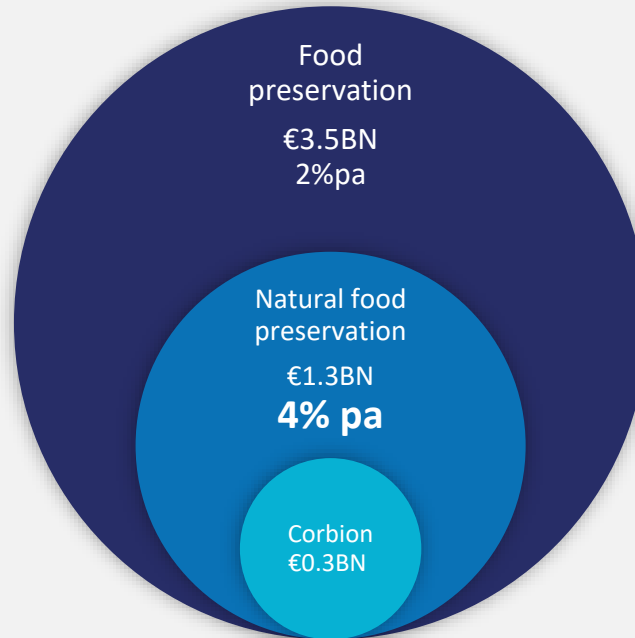
Health focus

Food safety

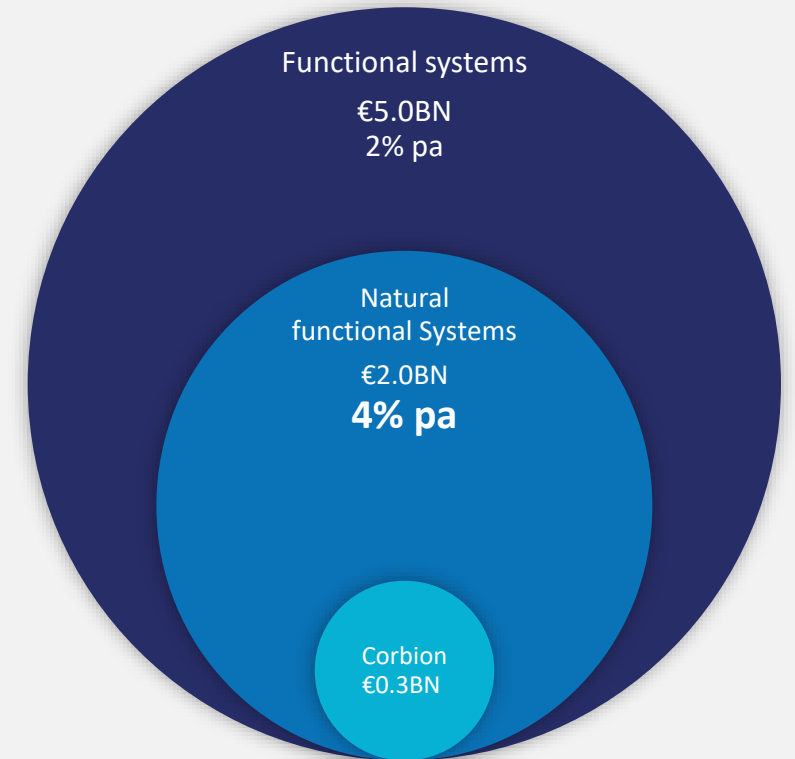
Food waste reduction

Regulatory changes

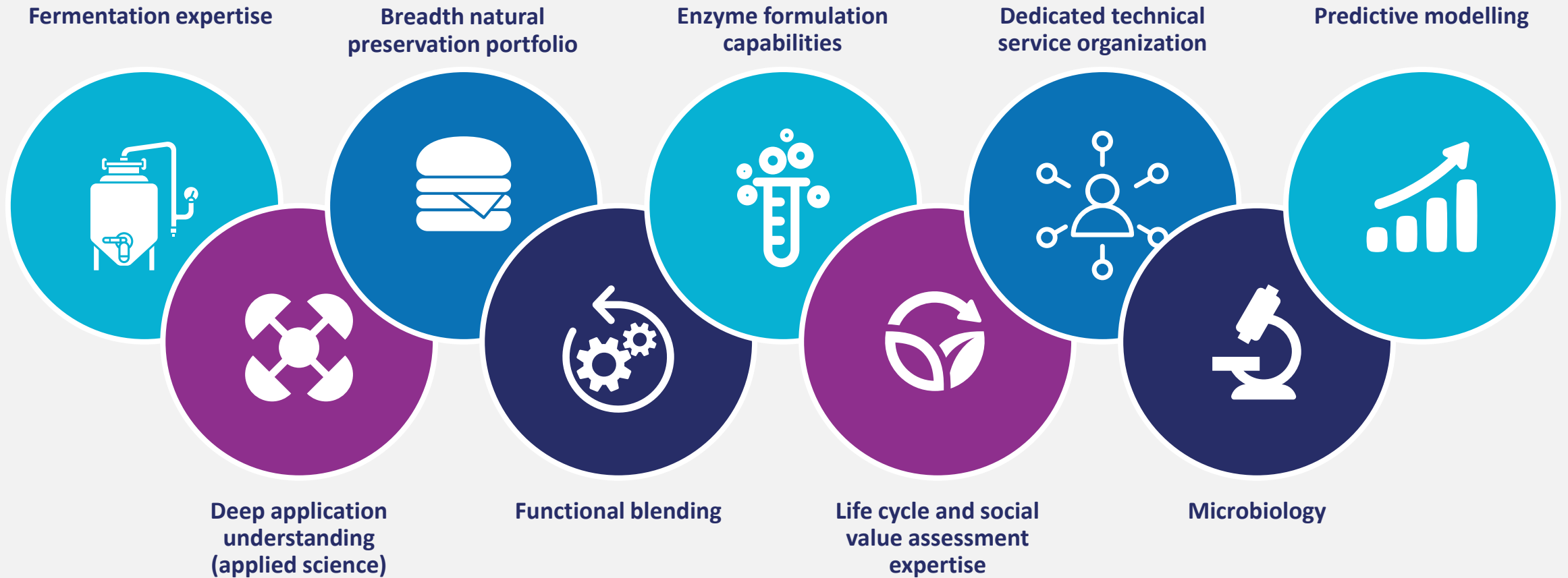
Food preservation
Market share: 25%



Functional systems
Market share: 15%



Differentiated core competencies and solution-based approach driving growth



Superior natural solutions for preservation and increased shelf-life

Unmatched portfolio

Lactic acid

Lactates

Natural mold inhibitors

Natural ferments

Vinegar

Natural antioxidants

Enzymes blends

Via tailor made solutions using core competences



Delivering key functionalities



Food safety



Natural Preservation



Shelf life
(freshness, texture, stabilize)



Health benefits

Different food markets



Bakery



Meat



Dairy



Savory



Plant based

Stepping into exciting markets

Leverage existing capabilities and investments

Geographical expansion in Europe and South-East Asia

Value creation opportunities - adjacencies

Antioxidants
Addressable
market
€900M

Dairy
stabilizers
Addressable
market
€850M

Natural mold
inhibitors
Addressable
market
€650M

Higher
growth profile
~5% pa
SFS sales
> €1BN
in 2030

Game changing natural mold inhibitors

Combination of various Corbion's proprietary ferments

Aligned to consumer market trends
for authentic natural ingredients

Sustainable reduction of food waste

Leveraging Corbion's core competencies

Strategic partnership with key global customers

Investments natural ferments US, Peoria

- Resulting in IRR of ~30%

Bread
=
#2 wasted
product*

7% GHG-
emissions
caused by
food loss and
food waste*

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Lactic acid & Specialties



Lactic Acid & Specialties

Global leader in lactic acid and its derivative solutions covering biochemicals, medical biopolymers, and bioplastics applications

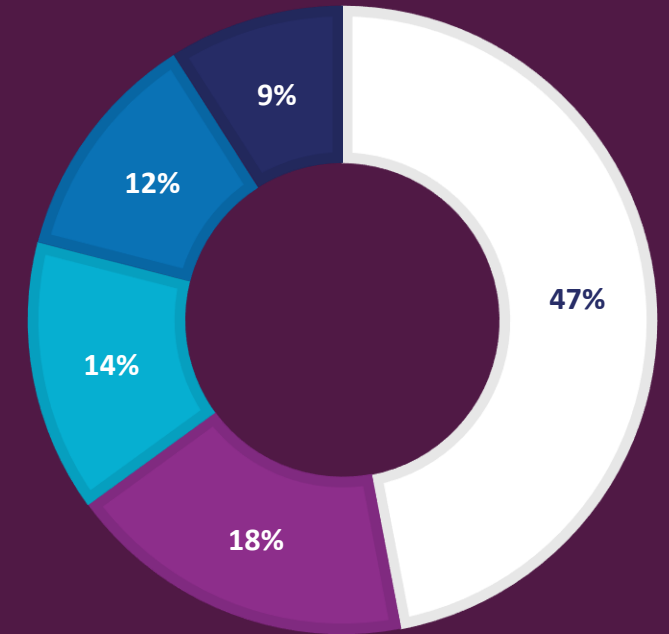
- Leading market growth through active business development
- Product strategy with focus on functionalities
- Leading position in PLA through joint venture with TotalEnergies

€312M*
net sales

34%
of core portfolio

15%
Sales growth
CAGR 20-22**

5%
volume/mix
CAGR 20-22**



■ Lactic acid ■ Lactate esters ■ Lactates
■ Biopolymers ■ Other

Expanding lactic acid capacity to drive our growth ambition

Expanded lactic acid capacity

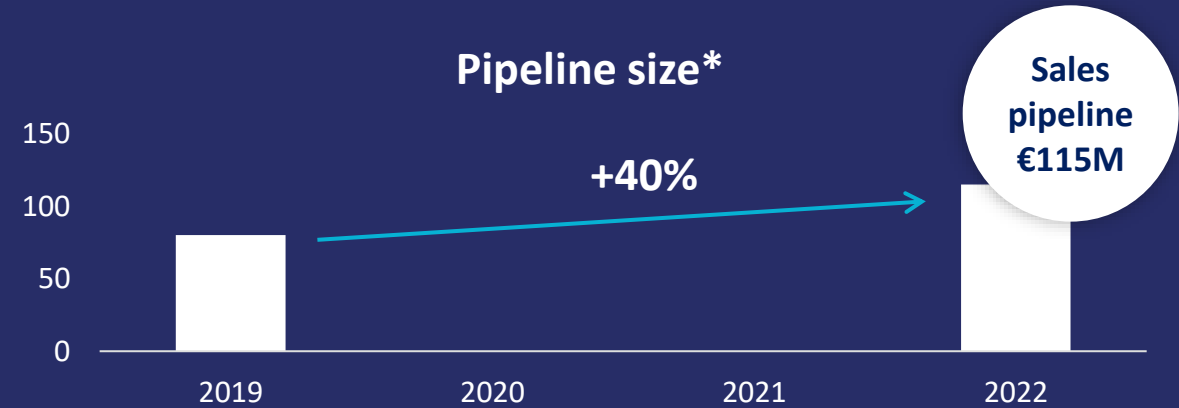
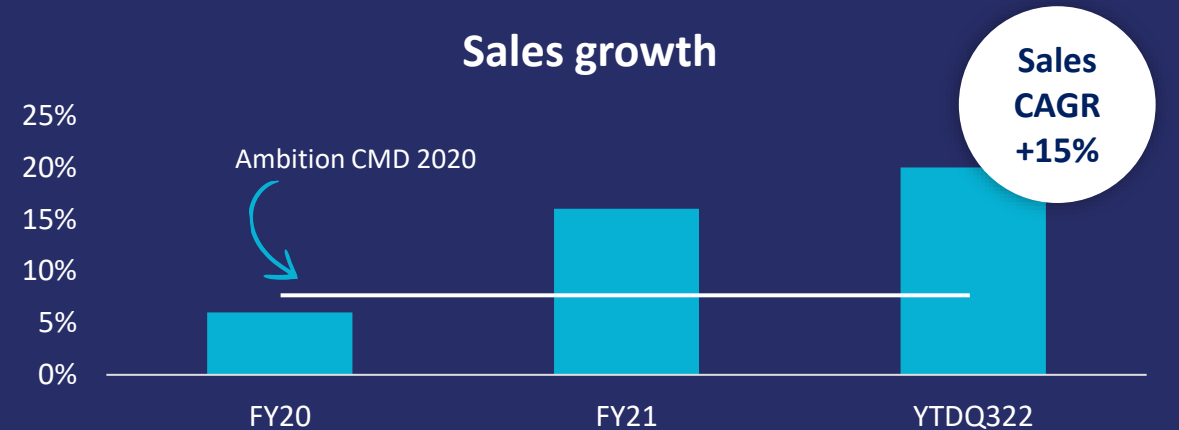
- Lactic acid debottlenecking program 80KTon
- Construction circular lactic acid plant in progress

Continuous derivative capacity expansion

- Lactate esters (Semiconductors), lactates (Pharma)

Medical biopolymers

- Expansion to support Drug delivery and Orthopedic



Product portfolio well positioned in attractive growth markets

LACTIC ACID TO PLA

Addressable market
€2.0BN
Market growth +15%*

Increased consumer concern about plastics

Brand owners increasing sustainability commitment

Need for circularity and end-of-life options

Unique performance in specific applications

MEDICAL BIOPOLYMERS

Addressable market
> €0.5BN
Market growth +15%*

Need for affordable health care

Need for minimal intervention, avoid second surgery

Growing population with access to quality health care

Increased focus on mental health and patient compliance

DERIVATIVES IN NICHE APPLICATIONS

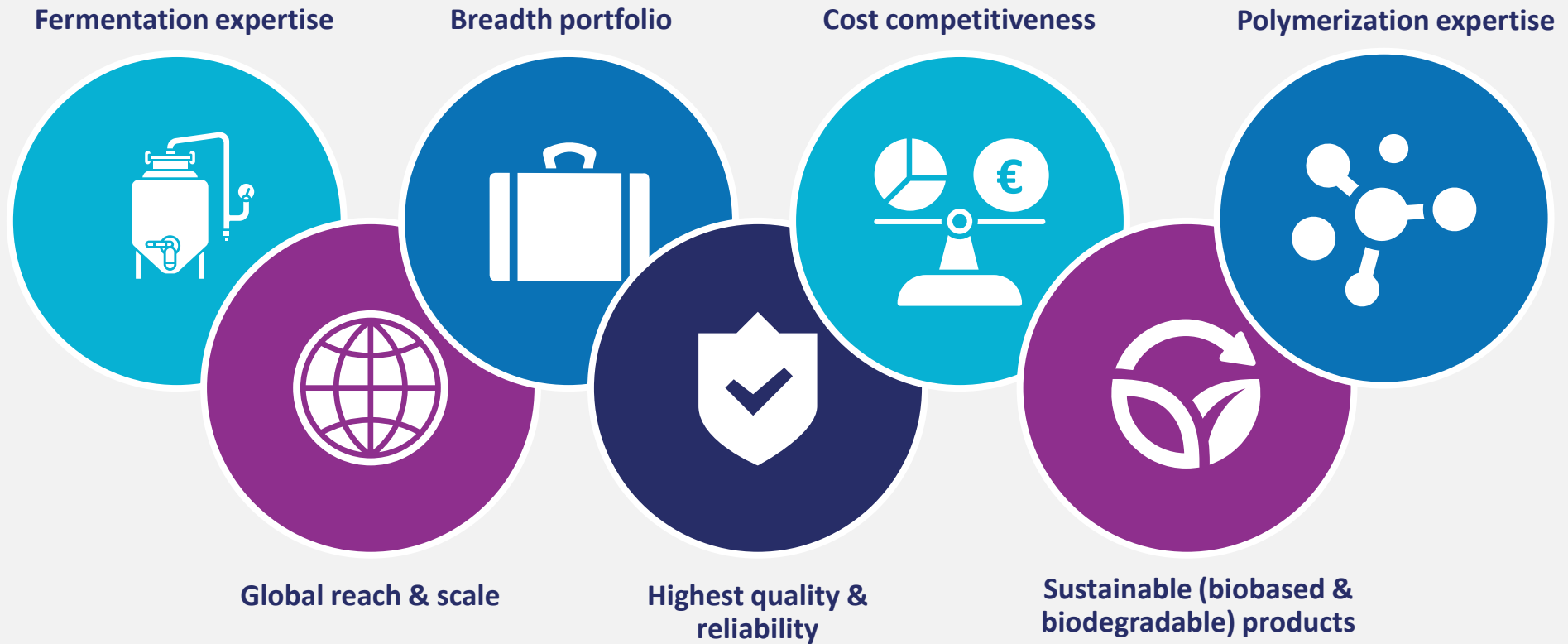
Addressable market
€0.4BN
Market growth +4%*

Semiconductors: High purity solvents for growing industry (datacenters, electronic vehicles, IoT, 5G)

Renal IV: Move dialysis from hospital to home

Home care: increased focus on anti- microbials and sanitation

Global market leader in lactic acid and derivatives with unparalleled product portfolio



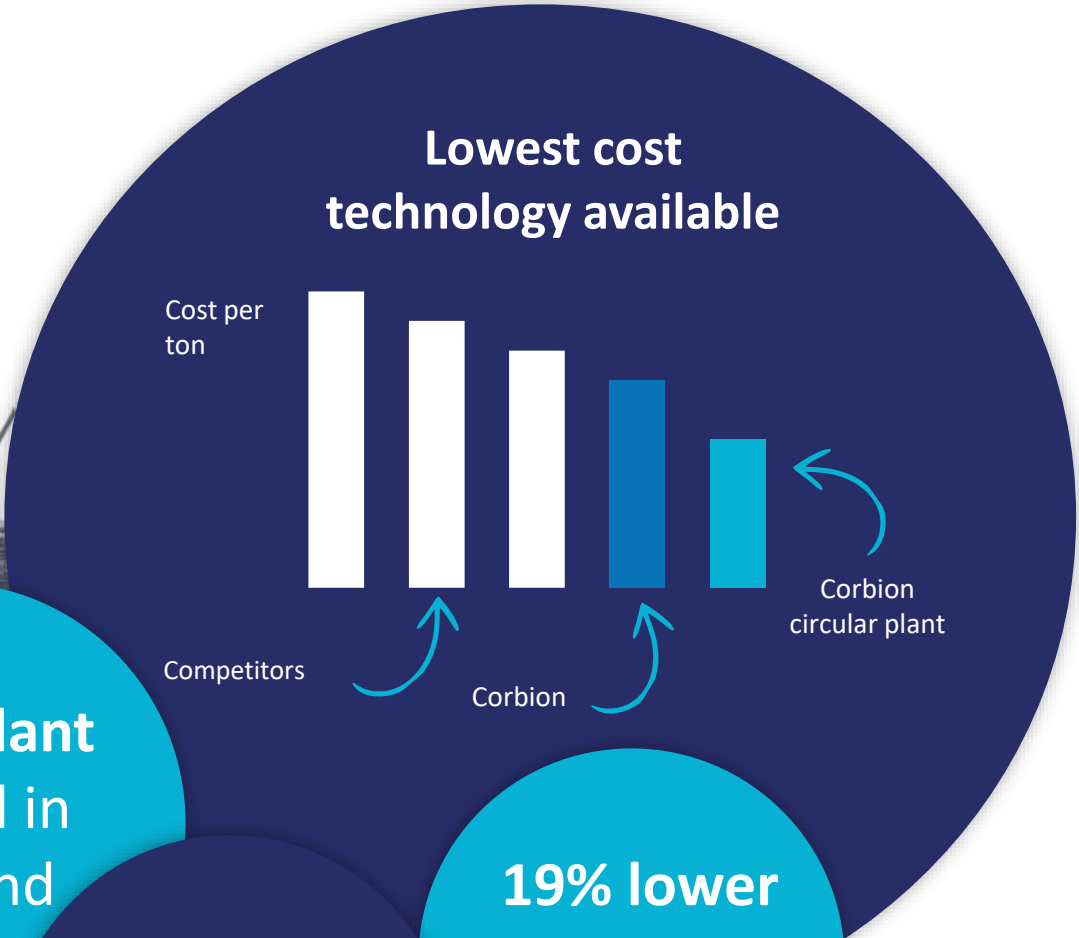
Flagship circular lactic acid plant commissioning in 2023



125kt plant
located in
Thailand

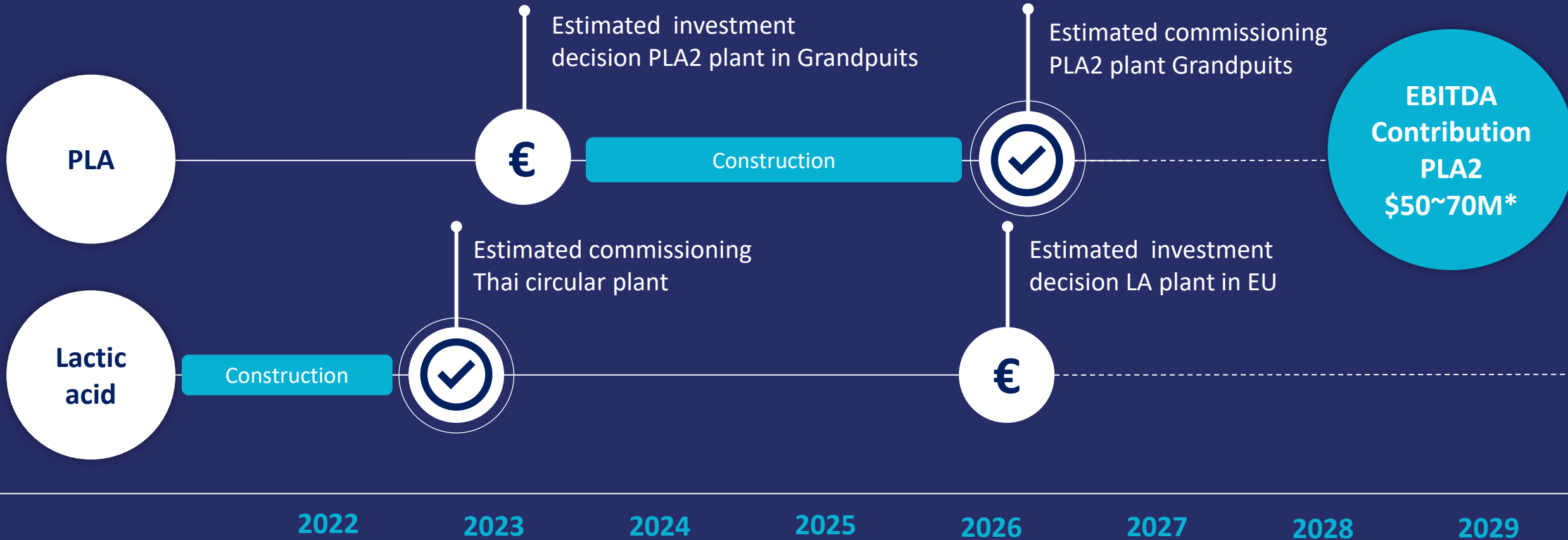
Lowest carbon
emissions
process

19% lower
carbon
footprint*



Capacity expansion to meet demand

- € Investment decision
- ✓ Commissioning





Strong performance 5 years after start-up

Average market growth over last 5 year 15%

Achieved market share 25%

Growth opportunities ahead

Partnership with TotalEnergies committed to growing PLA



Continue to expand application horizons

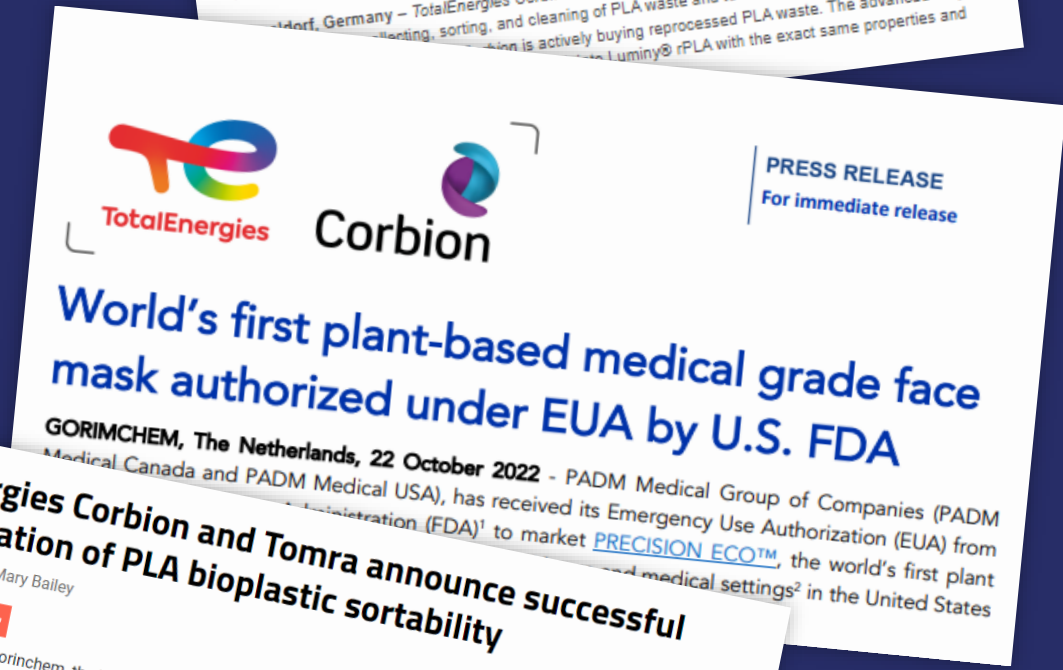
From product to application play

- Leveraging TotalEnergies application centers
- Non-woven, 3D printing, durable goods

End-of-life options

- Recyclability
- Home compostability

Circular raw materials

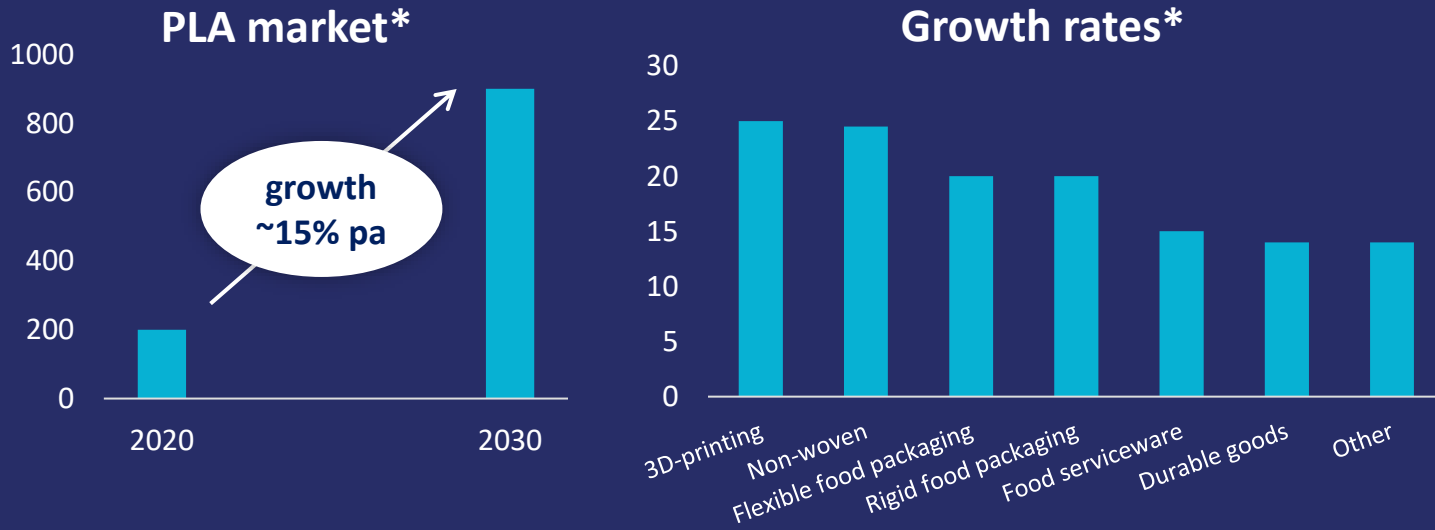


PLA market >800 kT in 2030

Non-woven and 3D-printing highest growth markets

PLA the most promising biopolymer and key building block for growth of biodegradable applications with PBAT, PBS and PHA

Sustainable pricing premium: non-woven, 3D-printing, durable goods and automotive applications



Our medical biopolymers sweet spot

High functionality derivatives, highly differentiated, strong margins

Drug delivery

- Controlled release of active ingredients (API)
- Highly effective drug delivery

Orthopedic

- Resorbable devices
- No repeated surgery needed

Regenerative medicine

- Support self-healing capacity of the body
- Explorative phase



CMD PRESENTATION 2022

Algae Ingredients



Algae Ingredients

Global supplier of algae-based ingredients providing nutritional benefits for human and animal diets

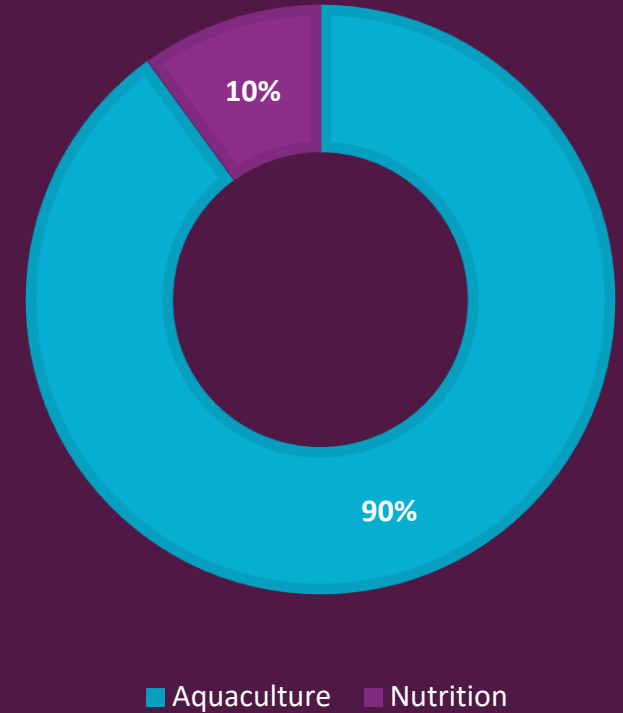
- Unleashing the power of algae fermentation to provide nutritional ingredients such as omega-3
- Reducing pressure on the world's limited resources
- Customers in the aquaculture, pet food, and other omega-3s applications

€31M*
net sales

3%
of core portfolio

84%
Sales growth
CAGR 20-22**

81%
volume/mix
CAGR 20-22**



Foundation for the future being built, positive EBITDA as of June 2022

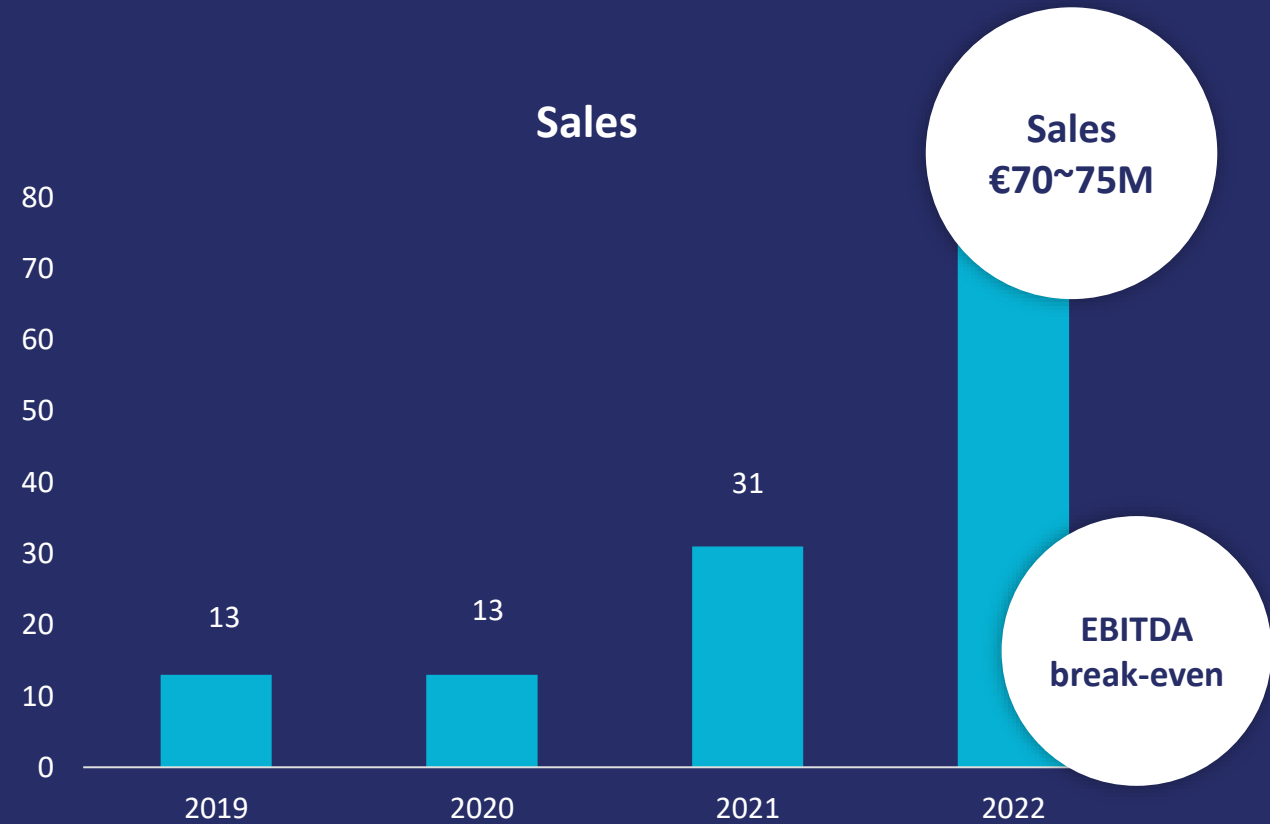
Omega-3 from niche to mainstream ingredient in aquaculture industry

Superior R&D delivery higher yielding algae strain

Commercial organization and customer base expanded

Production facility powered by renewable energy

EBITDA break-even from mid-2022

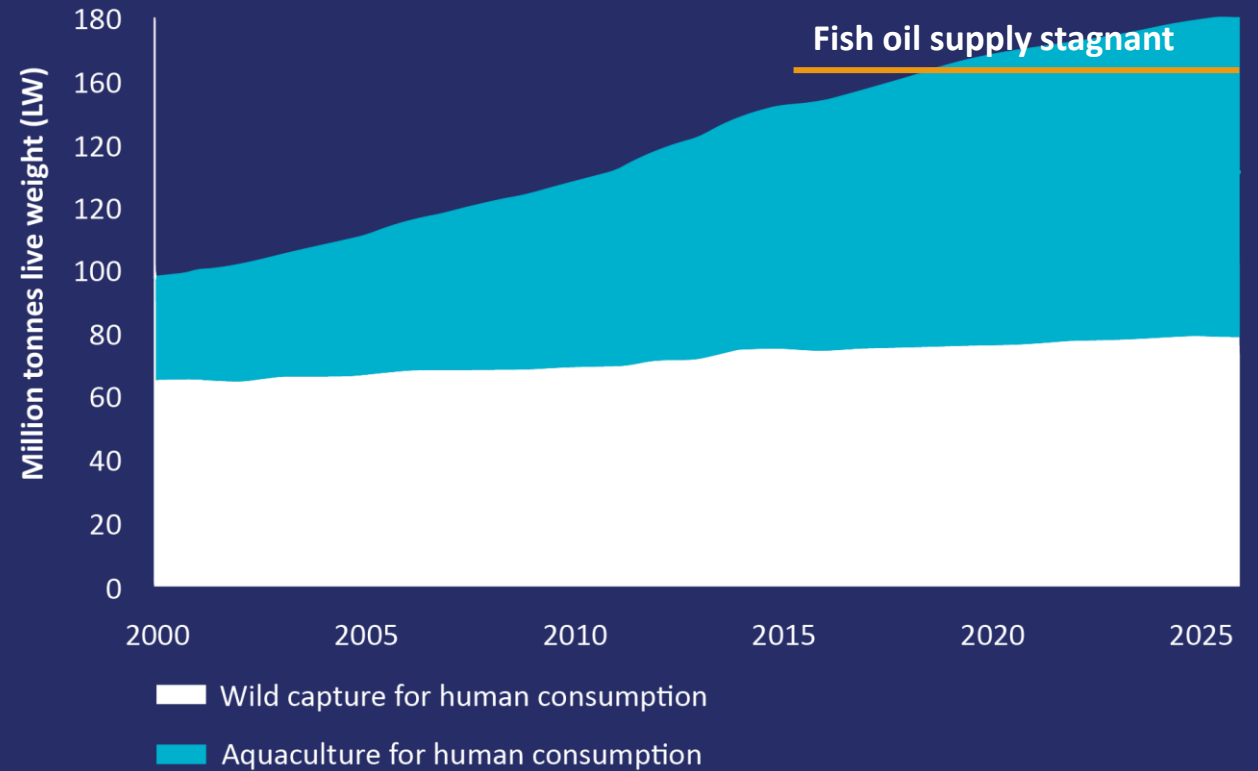


Demand omega-3 is outpacing supply, algae omega-3 key enabler in closing the demand-supply gap

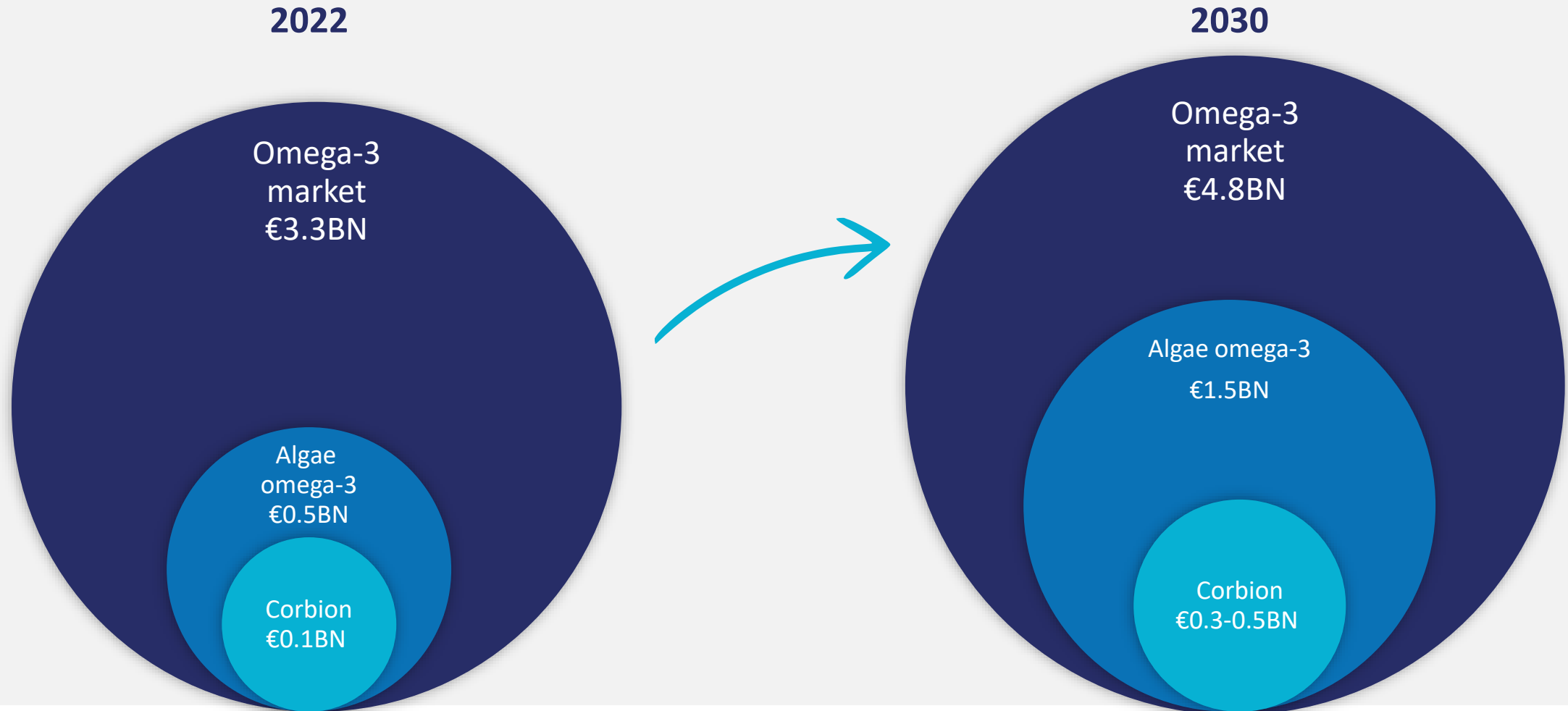
Growing omega-3 demand

Supply of omega-3 by fish oil being stagnant

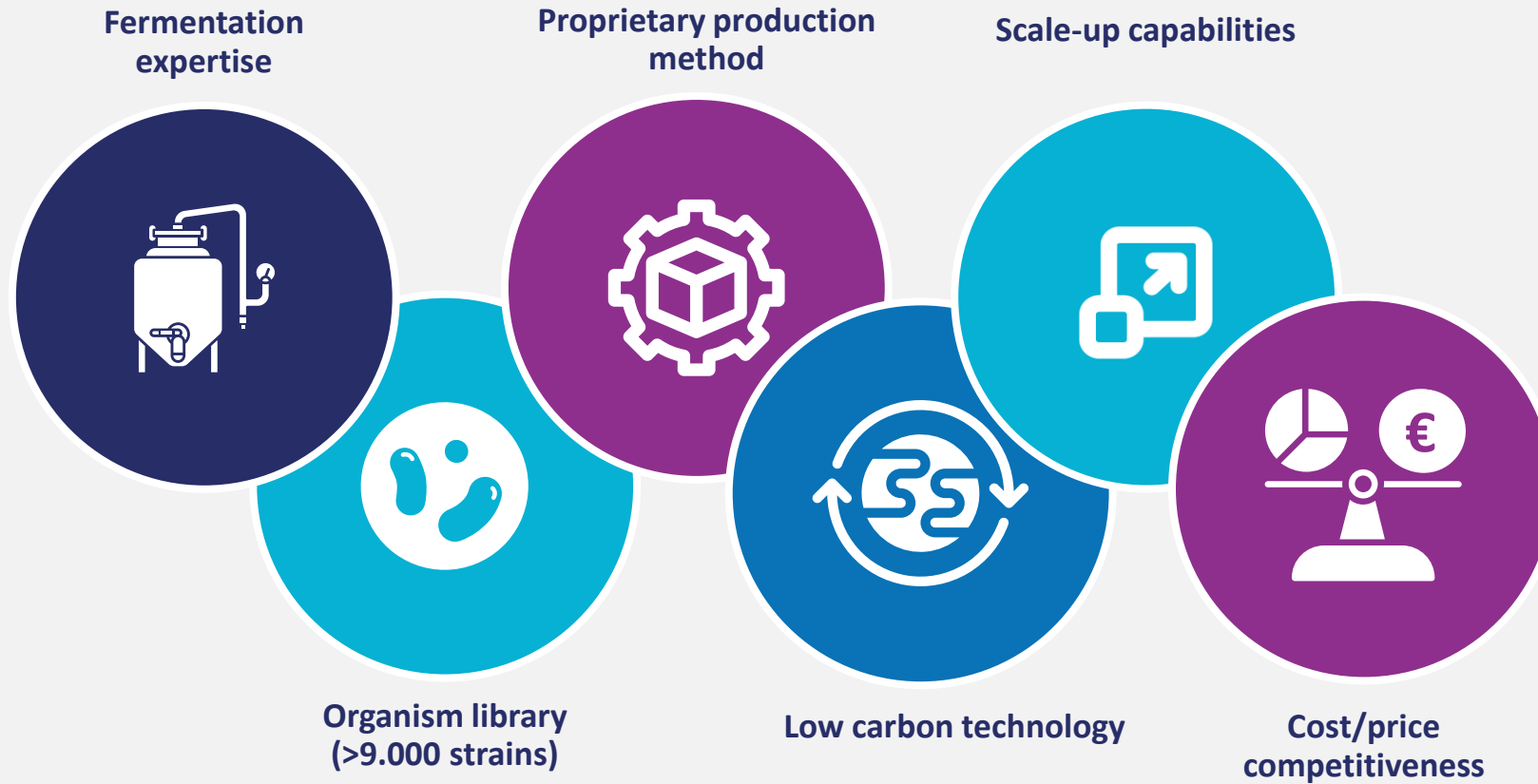
New technologies required to address this gap



Corbion well positioned to be a leading algae omega-3 player



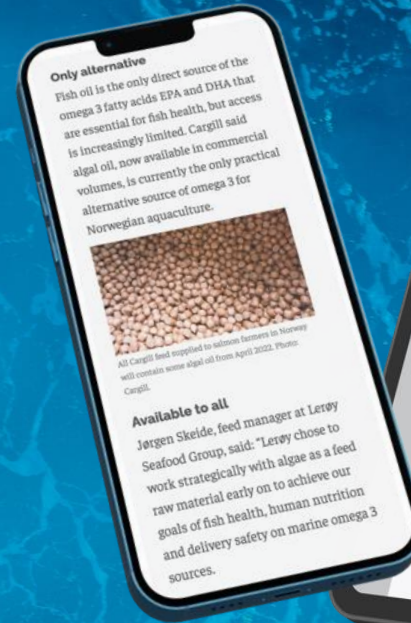
Combining our unique R&D expertise and commercial skills to deliver affordable solutions at scale



Major customer adoption showing algae omega-3 becoming mainstream in aquaculture



Source: [Microalgae no longer considered a niche ingredient in BioMar](#) | BioMar



Source: [Cargill to use algal oil in all Norway fish feed](#) - FishFarmingExpert.com

Value creation: sustainable sales growth at above average Corbion margin

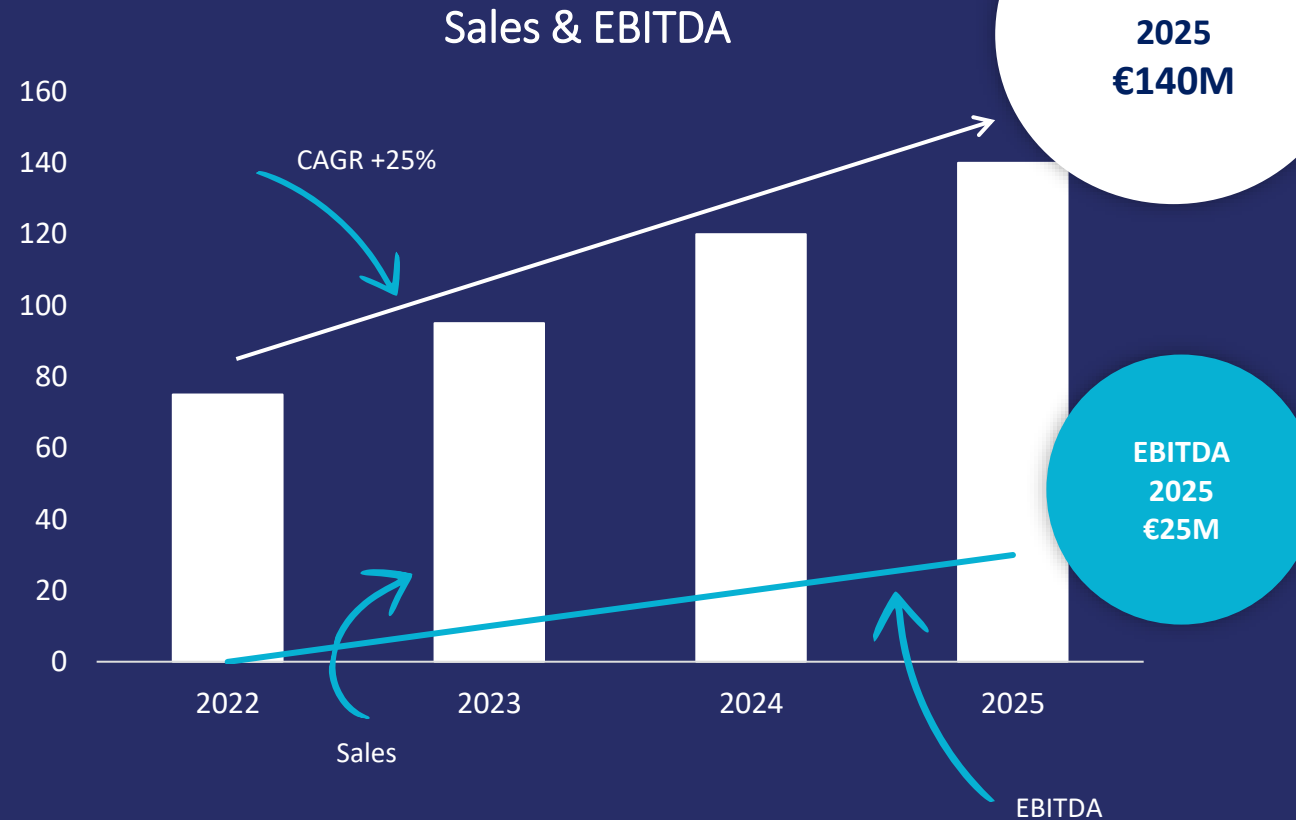
Continued growth in aquaculture

Growth opportunities in higher margin omega-3 markets

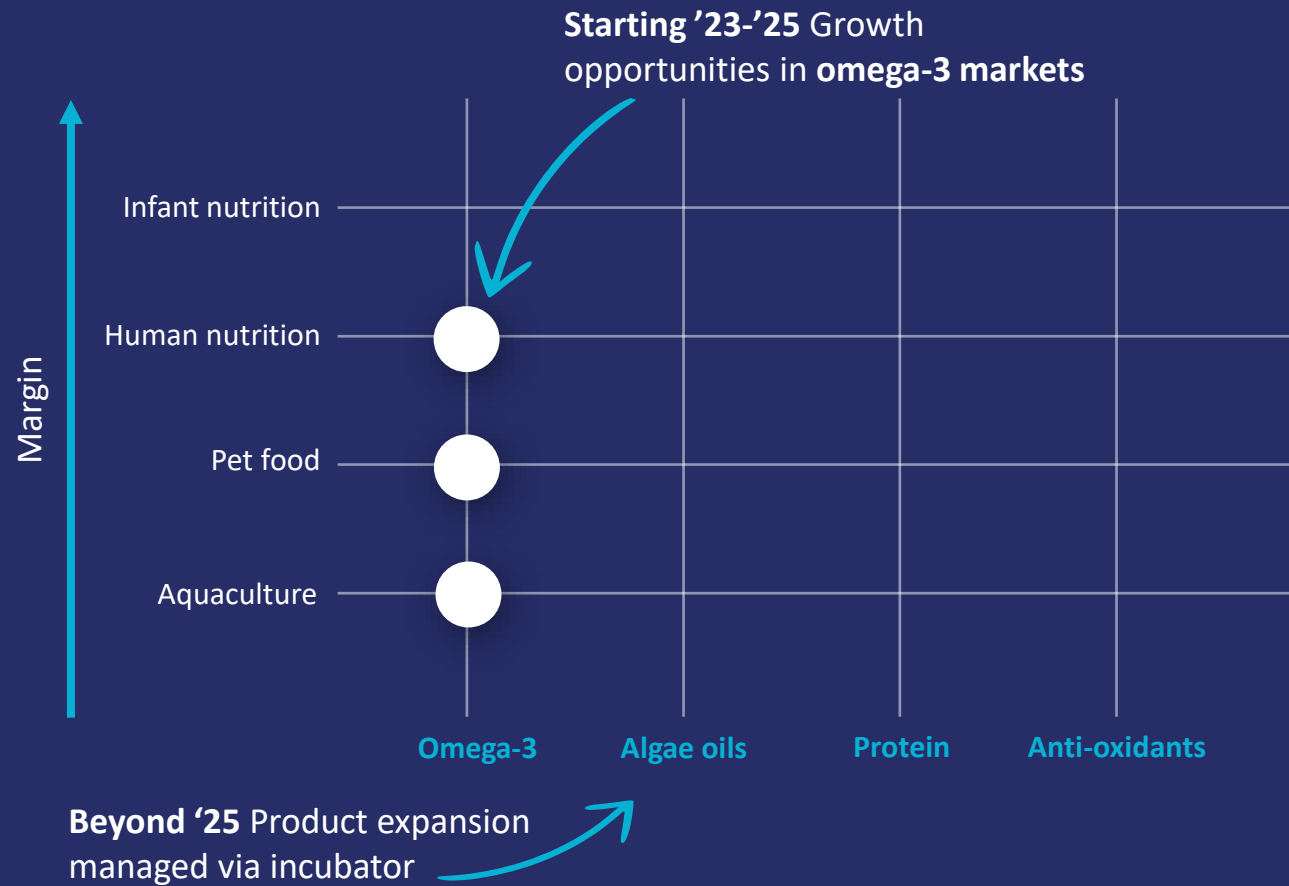
- Pet food
- Human nutrition

Further optimize yield algae strain

Exploring capacity extension options



Leveraging our portfolio of algae strains to address larger and more profitable markets

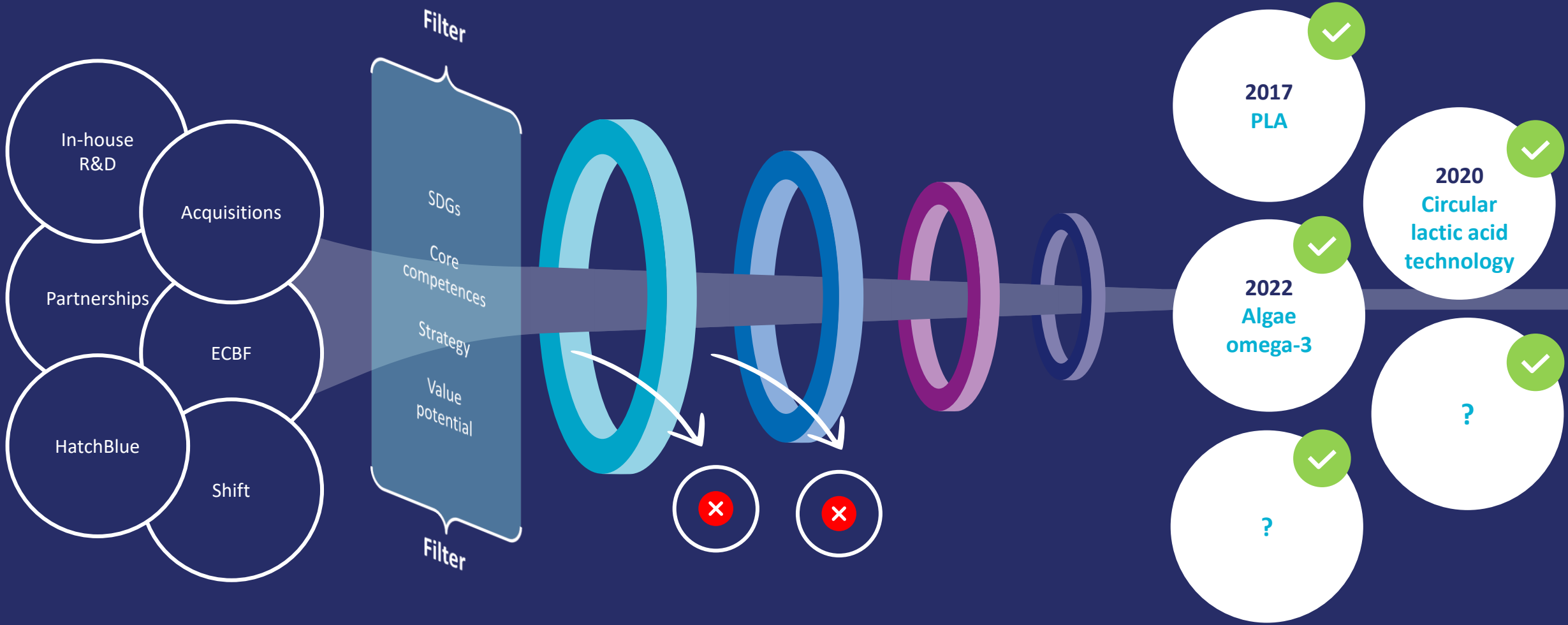


CMD PRESENTATION 2022

Incubator



Proven concept of incubator investments



Continued disciplined approach on long-term innovations

	Algae portfolio extension	Biopolymers	Natural preservation	Circular raw materials	Net zero
Time to commercialization	3-10 yr	5-10 yr	3-5 yr	10+ yr	5-10 yr
Product type	Protein, lipids	Copolymer	Novel antimicrobials	Feedstock flexibility	GHG-reduction
Core competencies	Fermentation	Fermentation/polymerization	Fermentation/functional blending	Fermentation	Process technology

■ Existing initiatives
 ■ New initiatives

EBITDA investment
 0.5%~1.5%
 of core sales

Strongly positioned for the future

Significant progress made in delivering Advance 2025

Increased net sales growth target '23-'25 to 5-8% p.a.
and Adjusted EBITDA growth to 15-20% p.a.

Divestment process non-core emulsifiers business initiated

Creation of Algae Ingredients as a new reporting segment

Actively managing down funding ratio

Raising the bar in sustainability

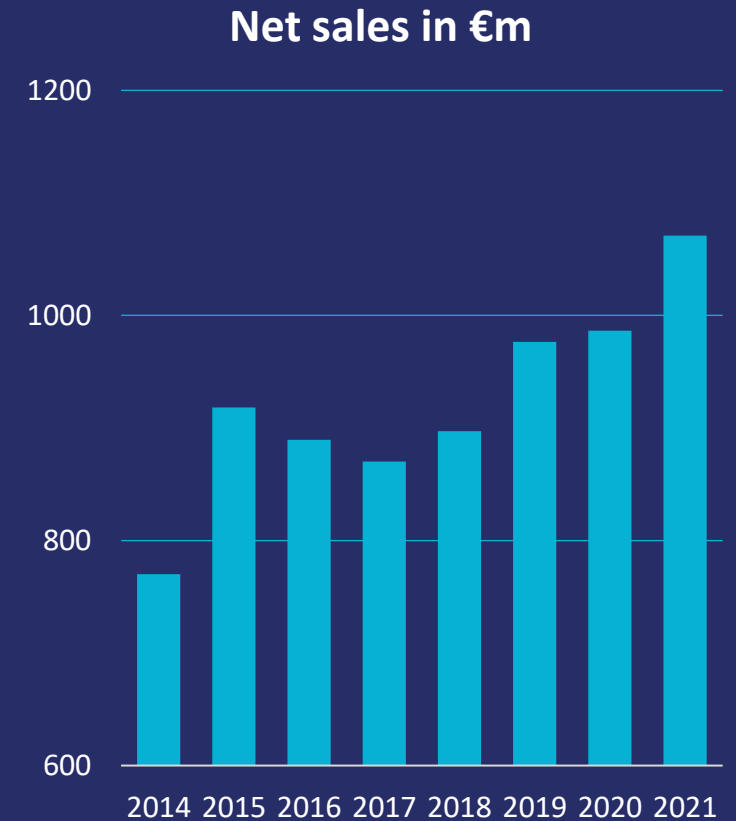
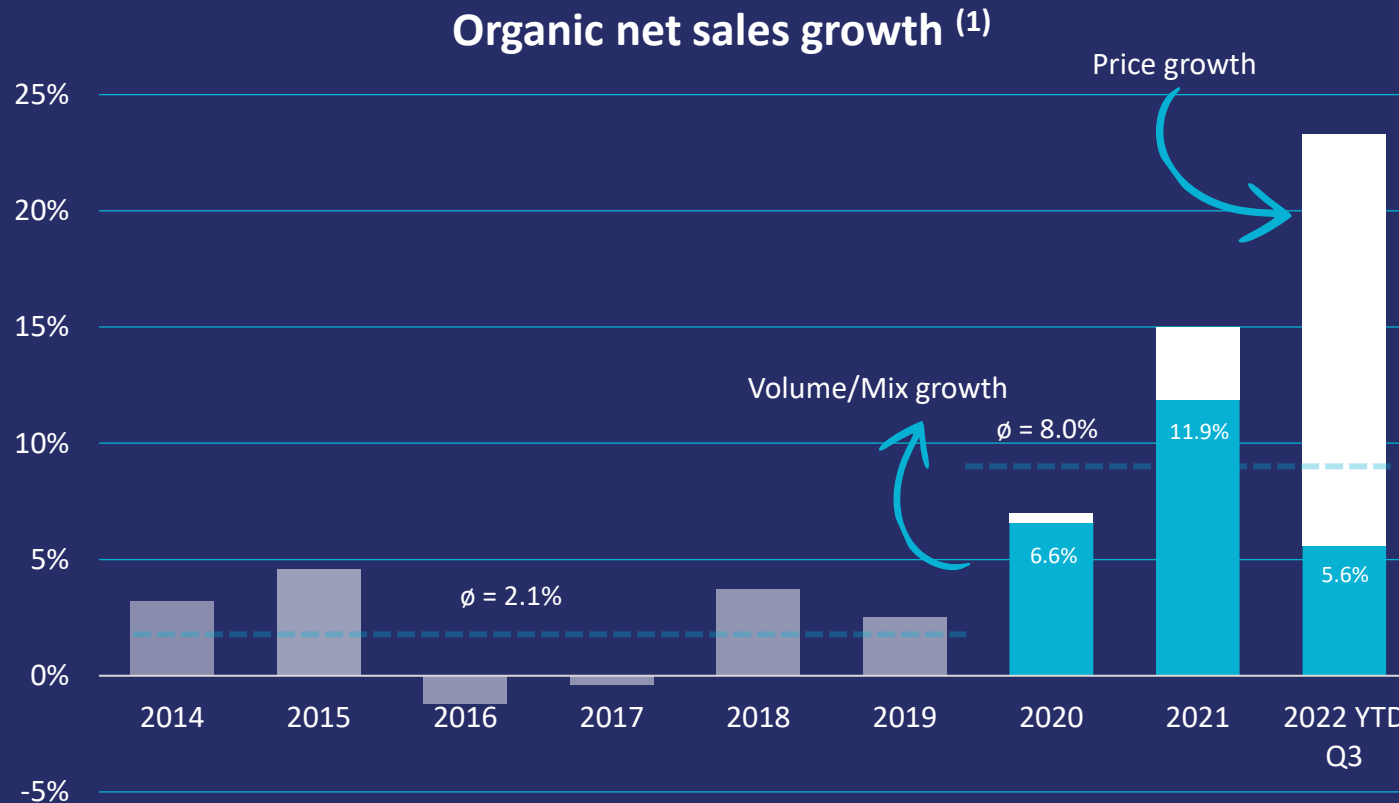




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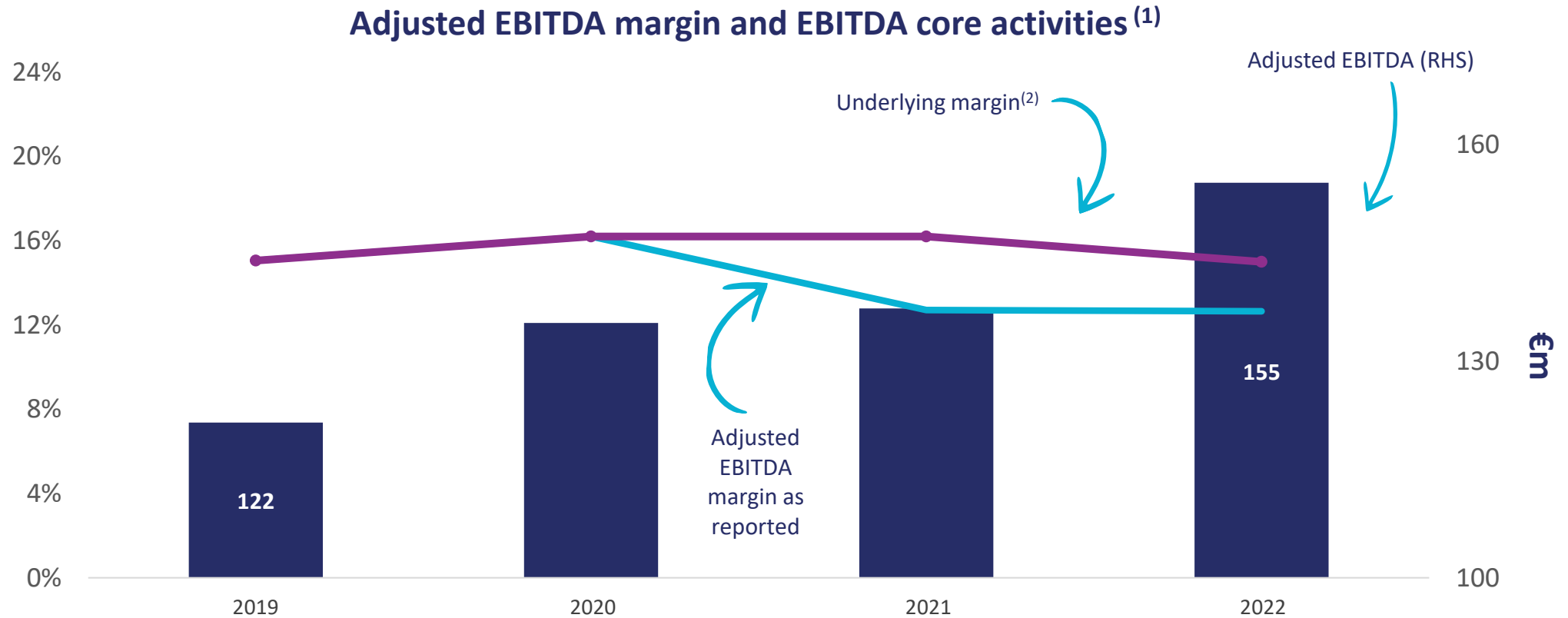
FINANCIAL UPDATE

Sales growth accelerated during early years of Advance 2025



(1) 2014-2019 organic growth Corbion, 2020-2022 YTD Q3 organic growth Corbion core activities

Core Adjusted EBITDA growing at stable underlying margin



(1) 2022 Adjusted EBITDA based on company compiled consensus (as per October 2022), 2022 Adjusted EBITDA margin based on YTD Q3 reported figures; (2) Adjusted EBITDA margin excl. margin dilution caused by impact of input cost inflation and related sales price increases.

Past performance against Advance 2025

Financial targets			2020 - 2022 outcome
Core activities	Organic Net sales growth	4 - 7%	15.1% ⁽²⁾
Core activities	EBITDA margin	>17% from 2025	-
Underlying ambitions			
Sustainable Food Solutions	Organic sales growth	~3%	12.8% ⁽²⁾
Lactic Acid & Specialties	Organic sales growth	~7%	14.8% ⁽²⁾
Incubator: Omega-3	EBITDA	Break-even by 2022	As of June 2022
Incubator: other	EBITDA investment	0.5 - 1.5% of Corbion core sales	0.5 - 1.0%
Corbion	Capex (2020-2022)	€345M - 375M	€485M
Corbion	ROCE	>WACC	11.3% ⁽¹⁾



(1) Average ROCE for 2020/2021; (2) average growth percentage 2020/2021/2022 Q3 YTD

Strong track record high-return investments



Omega-3

Project type	Acquisition
Investment size	€ 150M ⁽³⁾
Acquired in	2017-2018
Sales ⁽¹⁾	€ 140M
EBITDA ⁽¹⁾	€ 25M
IRR ⁽²⁾	15%



PLA

Project type	Greenfield
Investment size	\$ 155M
Operational in	2018
Sales ⁽¹⁾	\$ 225-255M
EBITDA ⁽¹⁾	\$ 50-70M
IRR ⁽²⁾	17-20%



Thailand lactic acid expansion

Project type	Expansion
Investment size	\$ 33M
Operational in	2020
Sales ⁽¹⁾	€ 50M
EBITDA ⁽¹⁾	€ 20M
IRR ⁽²⁾	21%

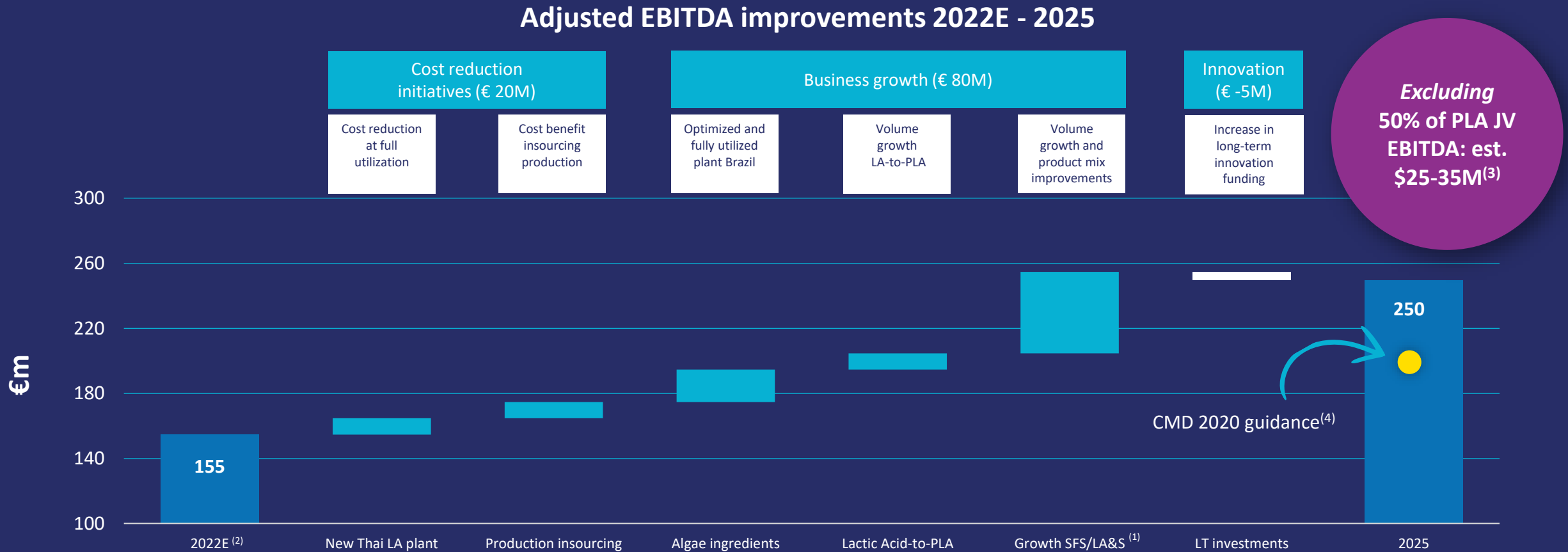


Lactate esters expansion

Project type	Expansion
Investment size	€ 6.5M
Operational in	2021
Sales ⁽¹⁾	€ 13M
EBITDA ⁽¹⁾	€ 7M
IRR ⁽²⁾	33%

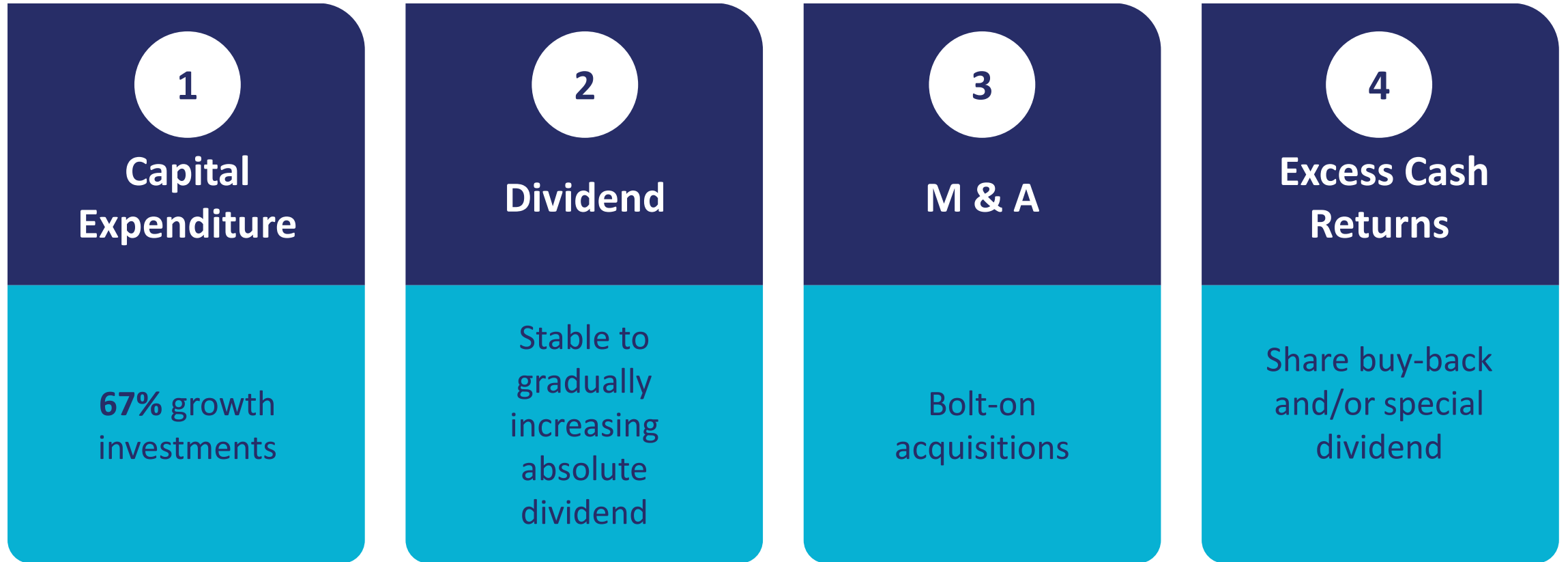
(1) assuming full utilization; (2) IRR post-tax, internal Corbion assumptions; (3) capex and opex

Pathway to € 250 million Core Adjusted EBITDA by 2025⁽¹⁾



(1) Midpoint Adjusted EBITDA growth at 17.5% p.a.; (2) 2022E Adjusted EBITDA based on company compiled consensus of € 154.7 million (5 October 2022); (3) Assumptions: fully utilized PLA plant Thailand (75kT), PLA price/kg \$3.00-3.40; (4) Assuming midpoint 4-7% organic net sales growth core activities 2019-2025, at 17% core Adjusted EBITDA margin in 2025 at constant currencies

Priorities for capital allocation



Mid-term covenant net debt/covenant EBITDA 1.5 – 2.5x

Investing for future growth

Key expansion projects 2023 – 2025

Sustainable Food Solutions (€ 125M)

- Powder derivatives
- Liquid derivatives
- Natural ferments phase #2

Lactic Acid & Specialties (€ 85M)

- Medical biopolymers expansion
- Pharma/semiconductor

Algae Ingredients (€ 50M)

- Expansion Orindiúva, Brazil

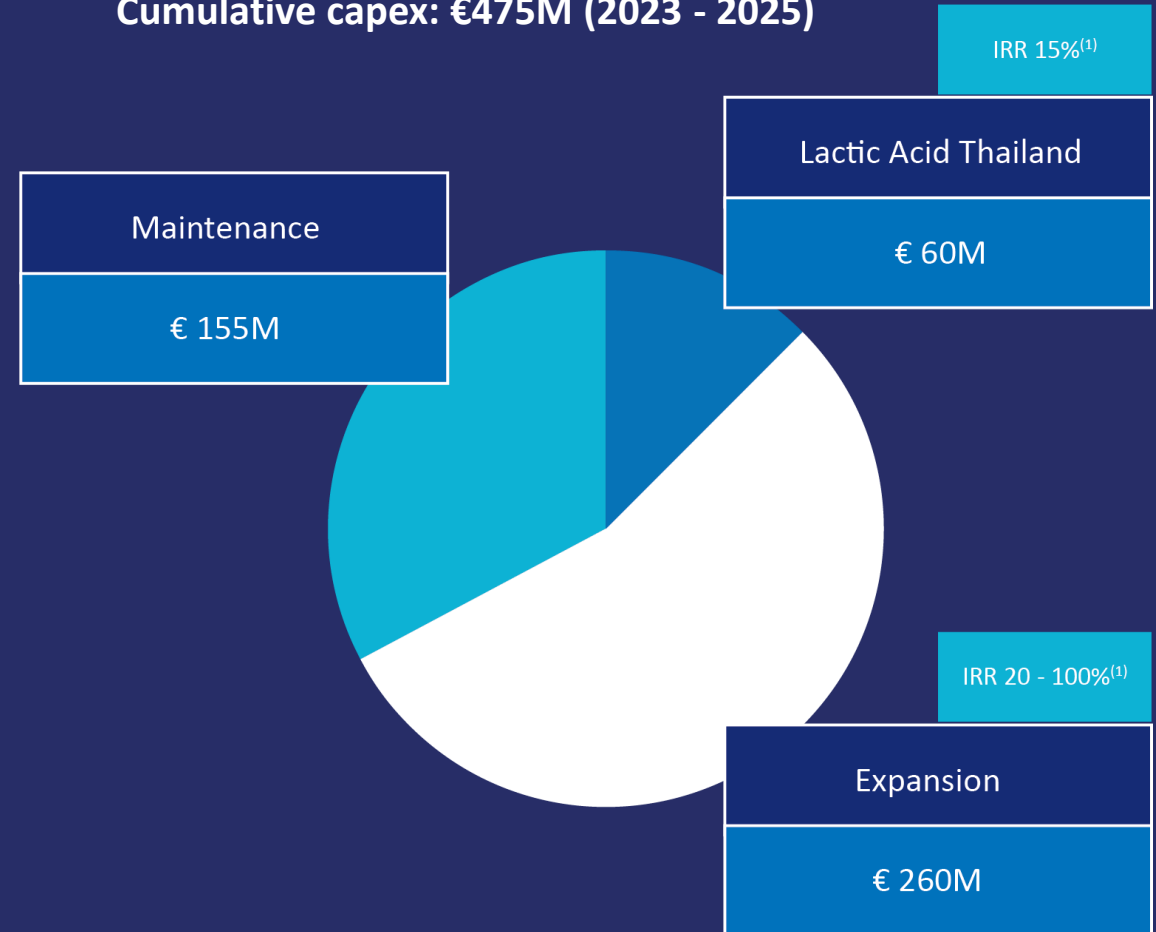
Completion new circular lactic acid plant Thailand (€ 60M)

Long-term projects

- PLA Grandpuits: Majority expected to be funded via non-recourse debt by TotalEnergies Corbion joint venture (decision expected in H2 2023)
- Lactic acid Europe: Beyond 2025

(1) post-tax

Cumulative capex: €475M (2023 - 2025)



Funding ratio⁽¹⁾ actively managed down

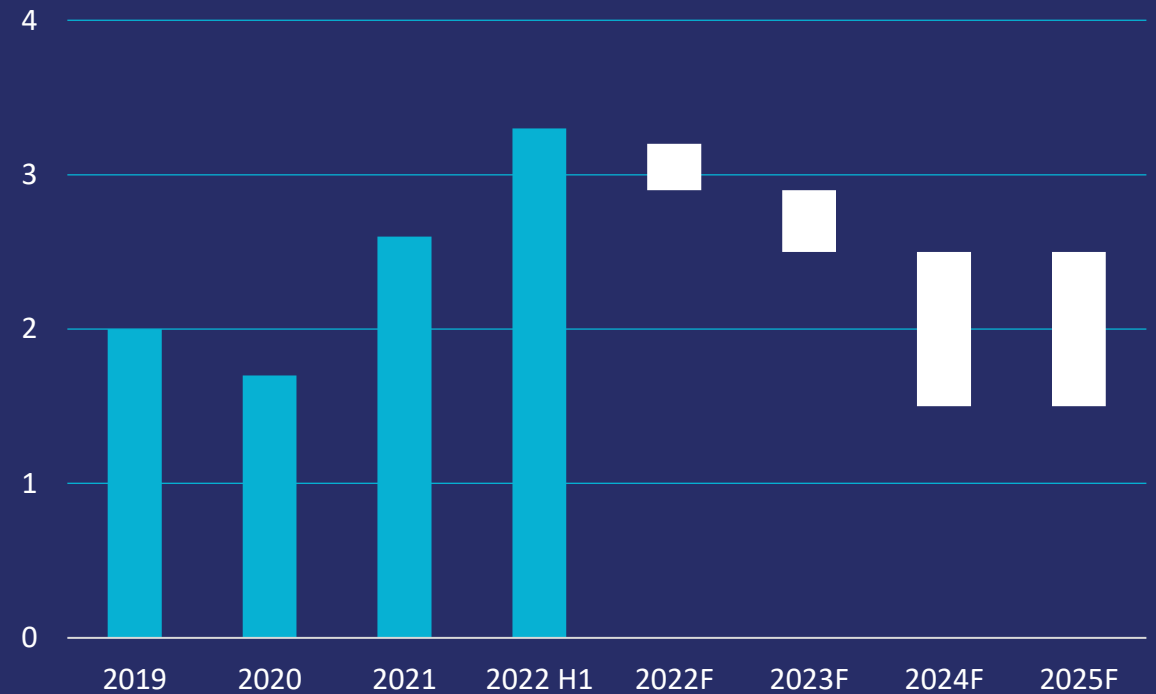
Divestment process non-core activities initiated

- Outlook funding ratio is excluding positive impact divestment

Debt structure

- Duration 4.9 years (as per 3Q22)
- Avg. interest rate at 2.2% (as per 3Q22)
- First redemption in 2025: \$125m

Covenant net debt/covenant EBITDA



(1) Covenant net debt/covenant EBITDA

New group segmentation

	Core	Non-core	
	Manage for Growth	Manage for Value	Manage for Exit
SUSTAINABLE FOOD SOLUTIONS	<ul style="list-style-type: none"> • Preservation • Functional systems • Single ingredients 		<ul style="list-style-type: none"> • Frozen dough • Co-packing blending • Emulsifiers
LACTIC ACID & SPECIALTIES	<ul style="list-style-type: none"> • Lactic acid • Lactic acid derivatives • Biopolymers 		
ALGAE INGREDIENTS	<ul style="list-style-type: none"> • Omega-3 		
INCUBATOR	<ul style="list-style-type: none"> • Algae portfolio extension • Biopolymers • Natural preservation • Circular raw materials • Net zero 		<ul style="list-style-type: none"> • Thrive • FDCA
TOTALENERGIES CORBION JOIN VENTURE (50/50)	<ul style="list-style-type: none"> • Poly Lactic Acid (PLA) 		

Algae Ingredients:
New business unit

Divestment non-core
emulsifiers business initiated

Guidance

Financial targets		CMD 2020	New ('23-'25)
Core	Organic net sales growth ⁽¹⁾	4 - 7% p.a.	5 - 8% p.a.
Core	Organic Adjusted EBITDA growth	-	15-20% p.a.
Underlying ambitions			
Sustainable Food Solutions	Organic sales growth ⁽¹⁾	~3%	~5%
Lactic Acid & Specialties	Organic sales growth ⁽¹⁾	~7%	~7%
Algae Ingredients	Organic sales growth ⁽¹⁾	-	~25%
Incubator: Omega-3	Adjusted EBITDA	Break-even by 2022	-
Incubator: other	Adjusted EBITDA investment	0.5 - 1.5% of Corbion core sales	0.5 - 1.5% of Corbion core sales
Core	Adjusted EBITDA margin	>17% from 2025	>17% from 2025
Corbion	Capex	€ 115M - 125M avg. p.a.	€ 160M avg. p.a.
Corbion	Covenant net debt/covenant EBITDA	~2.0x; peak at 2.5x	1.5-2.5x
Corbion	ROCE	> WACC	> WACC

(1) Organic growth defined as volume growth + mix growth, *excluding* price impact

Strongly positioned for the future

Significant progress made in delivering Advance 2025

Increased net sales growth target '23-'25 to 5-8% p.a.
and Adjusted EBITDA growth to 15-20% p.a.*

Divestment process non-core emulsifiers business initiated

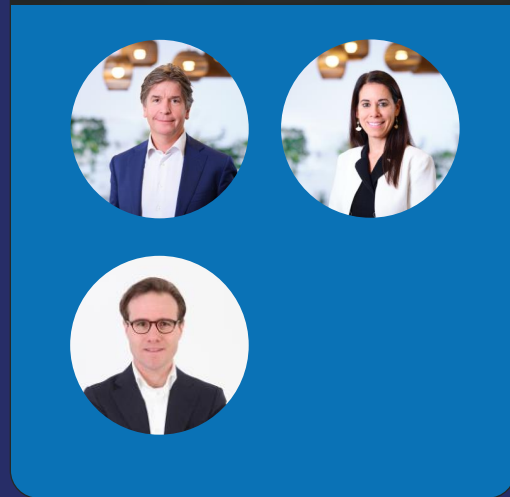
Creation of Algae Ingredients as a new reporting segment

Actively managing down funding ratio

Raising the bar in sustainability



Putting our strategy into action



Sustainable Food Solutions *global science, local taste*

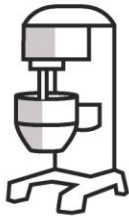
Preserve what matters

Harnessing nature's defense mechanisms

NATURAL MOLD INHIBITION



Through service, we meet customer needs



Baking equipment



Water/inputs



Regulations



Local taste



Application

Corbion technology gives



Pathogen, spoilage and mold control



Less waste



Transparency



3rd party authentication



Sensory expertise

Significant market potential



GROWING GLOBAL MARKET

for replacing synthetics

Bakery | **Sauces & dressings** | **Meat** | **Dairy**

Adapting for better outcomes with **applied science & technical solutions**

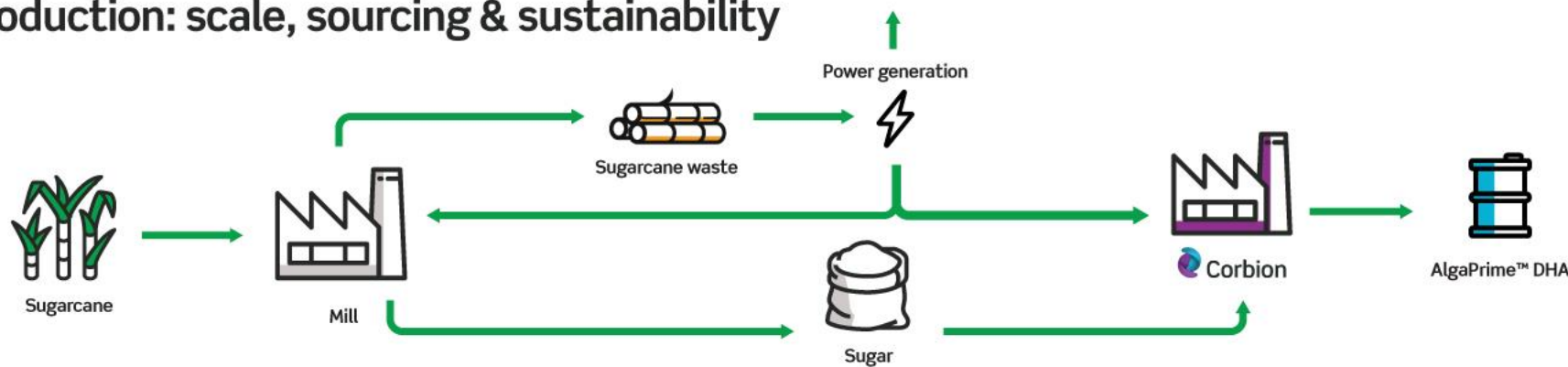


Algae preserves what matters

Revolutionary omega-3 sourcing from algae



Production: scale, sourcing & sustainability



What's next? Closing the Ω -3 gap



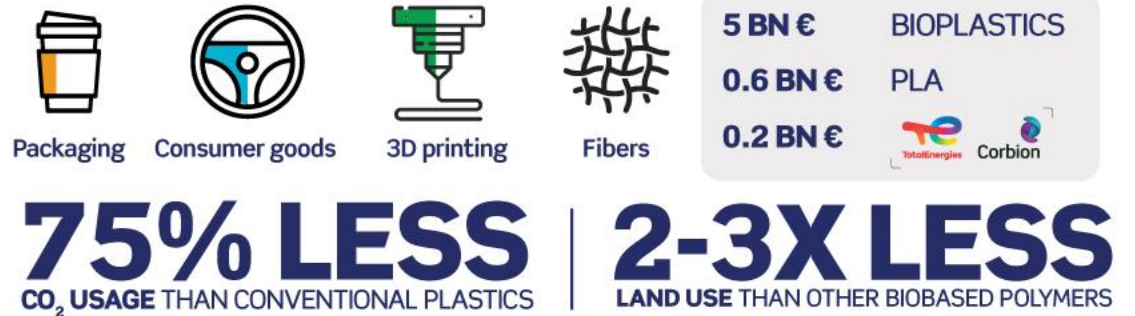
Adapting better outcomes for **nutritional ingredients**

Polylactic acid (PLA) *preserves what matters*

Luminy® PLA bioplastics enable the circular economy



PLA applications are intensifying



Compostable bioplastic facts

- Luminy® PLA is made from **sustainably sourced** sugarcane
- It degrades in industrial composting facilities



SCAN TO WATCH
PLA COMPOSTABILITY VIDEO

**DISINTEGRATES
FASTER**
THAN ORANGE PEELS AND PAPER¹

¹<https://research.wur.nl/en/publications/the-fate-of-compostable-plastic-products-in-a-full-scale-industry>

Rethinking recycling with PLA bioplastics

PLA PACKAGING
**IS SORTABLE
AND RECYCLABLE**



SCAN TO WATCH
PLA RECYCLABILITY VIDEO

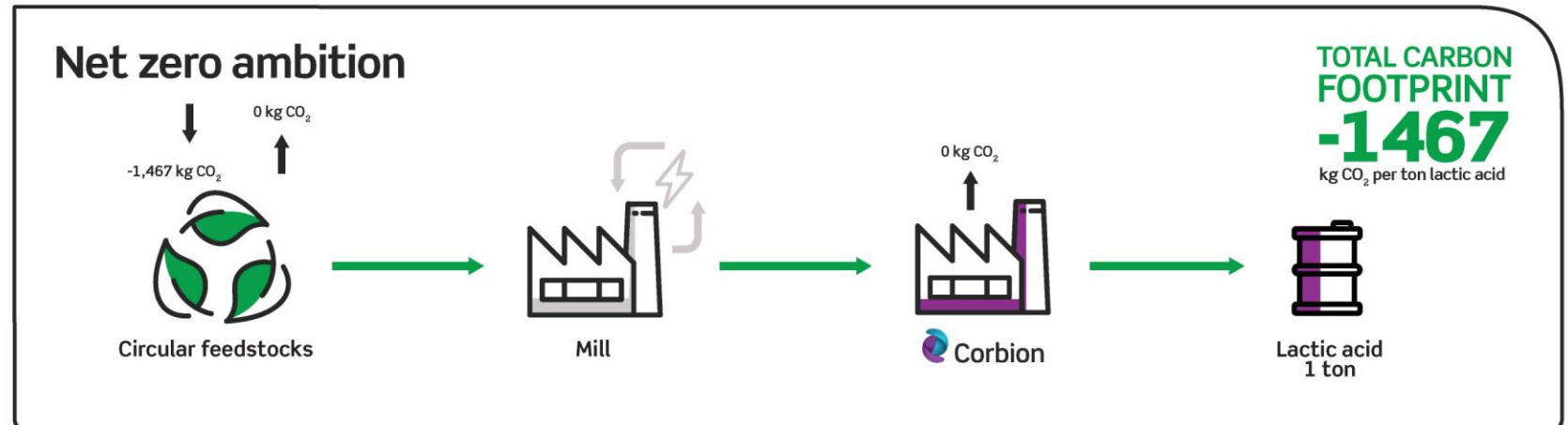
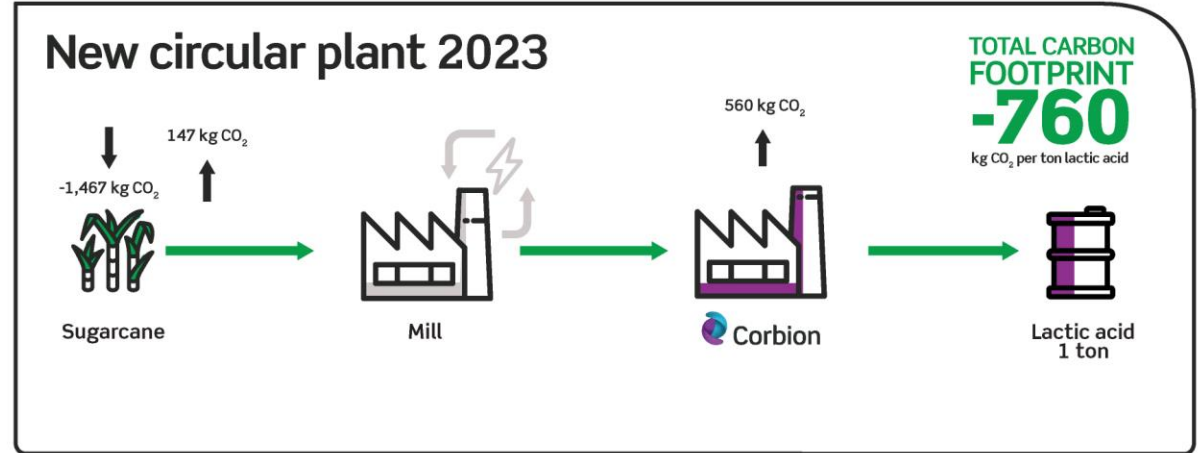
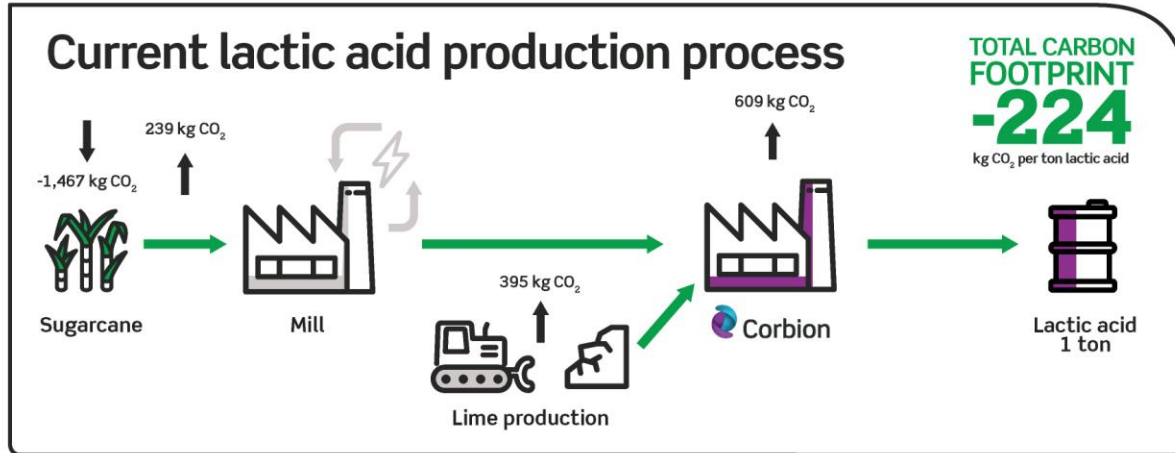


PLA PRODUCT LIFE CYCLES
CAN BE ENDLESS

Adapting better outcomes for a **brighter future**

Net zero preserves what matters

↓ CO₂ removal from the atmosphere
↑ CO₂ emissions



Adapting better outcomes for sustainable manufacturing



Biomaterials *preserve what matters*

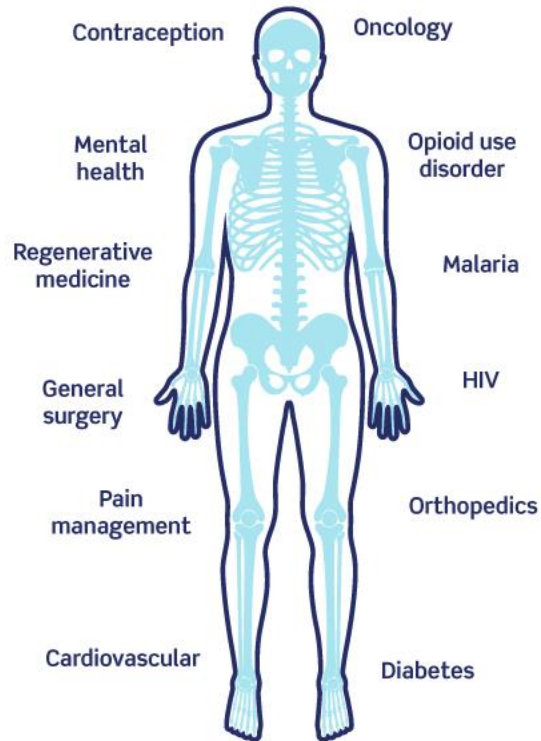
Resorbable medical devices



Patient-friendly solutions

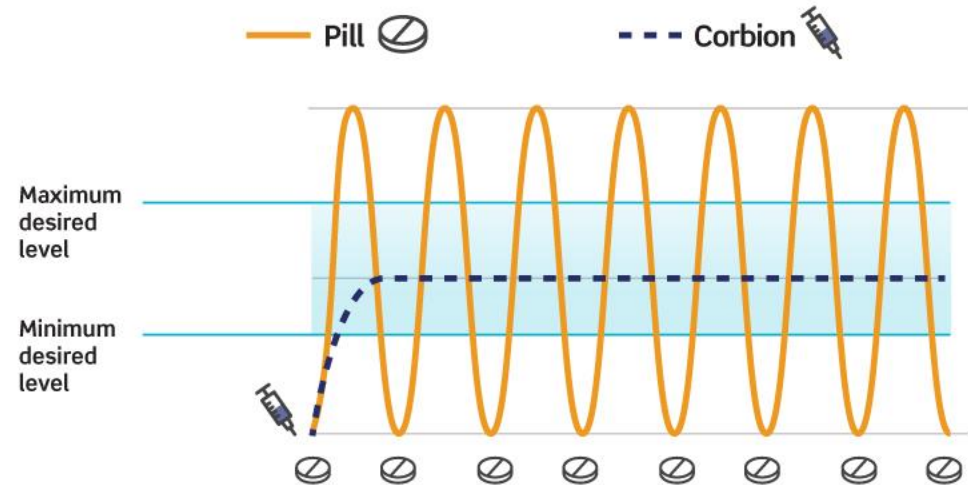
Improved lives + more affordable health care system

From implants to injectables



Controlled-release drug delivery

Plasma drug concentration



Advantages

- Better patient adherence
- Highly effective
- Lower drug dose
- Less adverse effects
- Lower environmental impact
- Long regulatory history

Adapting better outcomes for **your health**



Corbion
Keep creating