



# Chr. Hansen Q4 2022/23

Investor presentation

October 12, 2023

CHR HANSEN

*Improving food & health*





## Safe harbor statement

This presentation contains forward-looking statements that reflect management's current views and expectations with respect to Chr. Hansen's future and potential financial performance.

Those forward-looking statements are based upon data and information currently available to the company, and on a variety of assumptions, many of which may be beyond our control and subject to risks and uncertainties that may cause the actual results of the Company or the industry to differ materially from such forward-looking statements.

The information, opinions and forward-looking statements are provided as of the date stated in this document and the Company is under no obligation to publish any updates thereof except for what is required by applicable law or stock exchange rules and regulations.

# Strong Q4 supports a solid performance for the first twelve months of the extended financial year 2022/23

Financial highlights Q4/YTD 2022/23



ORGANIC REVENUE GROWTH

## 16%

YTD 2022/23: 11%



EBIT MARGIN  
before special items

## 28.0%

 (0.1%-pt vs. LY)

YTD 2022/23: 26.9%  
(0.1%-pt vs. LY)



FREE CASH FLOW  
before acquisitions and special items

## EUR 69m

YTD 2022/23: EUR 202m

CHR HANSEN

*Improving food & health*

# Double-digit growth in lighthouses and core

Strategic and operational highlights Q4/YTD 2022/23

## 2025 STRATEGY



### REINVEST

Successful customer collaborations to drive productivity and accelerate innovation in **Dairy** and plant-based including introduction of live probiotics in ambient category



### REINVEST

New probiotic strain introduced in gut-brain in **Human Health** with publication of its first clinical study



### LEVERAGE

Approval from the Chinese authorities with regards to the technology to produce each of three **HMOs** (2'-FL, LNT and 3-FL)

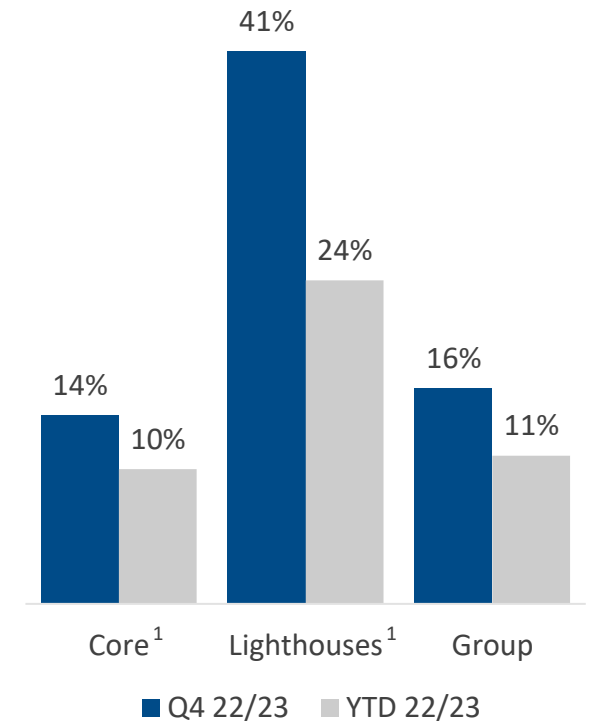


### GROUP

Solid **pricing contribution** from inflation-driven price increases

## ORGANIC GROWTH

Q4/YTD 2022/23



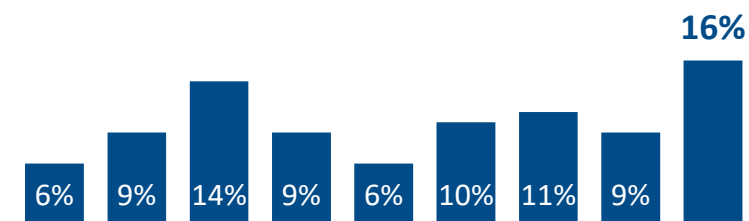
<sup>1</sup> Core includes FC&E ex. Bioprotection and Fermented Plant Bases, Human Health and Animal Health. Lighthouses includes Bioprotection, Fermented Plant Bases, HMO and Plant Health.

# Double-digit growth in both FC&E and H&N driven by volume and pricing

Organic sales performance by business area



GROUP

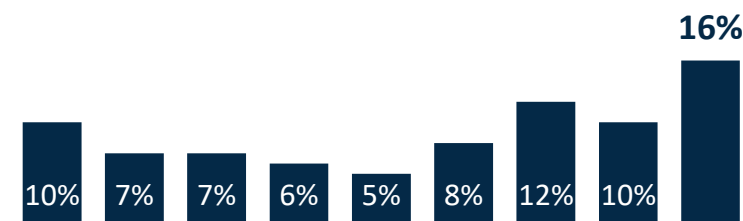


Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
21/22					22/23			

	VOLUME/ MIX	PRICE	FX	EUR GROWTH
Q4	+9%	+7%	-9%	+7%
YTD	+5%	+6%	-1%	+10%



FOOD CULTURES & ENZYMES

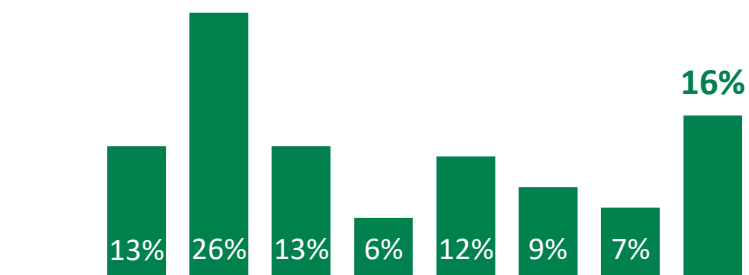


Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
21/22					22/23			

	VOLUME/ MIX	PRICE	FX	EUR GROWTH
Q4	+6%	+10%	-10%	+6%
YTD	+3%	+8%	-2%	+9%



HEALTH & NUTRITION<sup>1</sup>



Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
21/22					22/23			

	VOLUME/ MIX	PRICE	FX	EUR GROWTH
Q4	+14%	+2%	-6%	+10%
YTD	+8%	+3%	0%	+11%

<sup>1</sup> The acquisition of HSO HC is included in organic growth since Q3 2020/21 (closing April 2020), UAS Labs (closing July 2020) and Jennewein (closing October 2021) since Q1 2021/22.

CHR HANSEN

Improving food & health

# Strong growth across most regions

Organic sales performance by region

ORGANIC GROWTH Q4/YTD 2022/23

**+15%**

YTD: +7%

**NORTH AMERICA**

33% of revenue YTD

- Growth driven by both H&N and FC&E
- H&N supported by very strong volume growth and pricing initiatives
- FC&E driven by solid volume growth across categories

**+20%**

YTD: +20%

**LATIN AMERICA**

12% of revenue YTD

- Growth driven by pricing initiatives, including EUR-based pricing, and volume growth in FC&E
- H&N delivered a slight decline

**+20%**

YTD: +16%

**EUROPE, MIDDLE EAST & AFRICA**

38% of revenue YTD

- Growth driven by both H&N and FC&E
- H&N supported by very strong volume growth and pricing initiatives
- FC&E supported by pricing, including EUR-based pricing, as well as solid volume growth

**+5%**

YTD: +4%

**ASIA-PACIFIC**

17% of revenue YTD

- Growth driven by both FC&E and H&N
- China contributed positively to the growth of FC&E
- Growth mainly driven by volume, but also supported by pricing

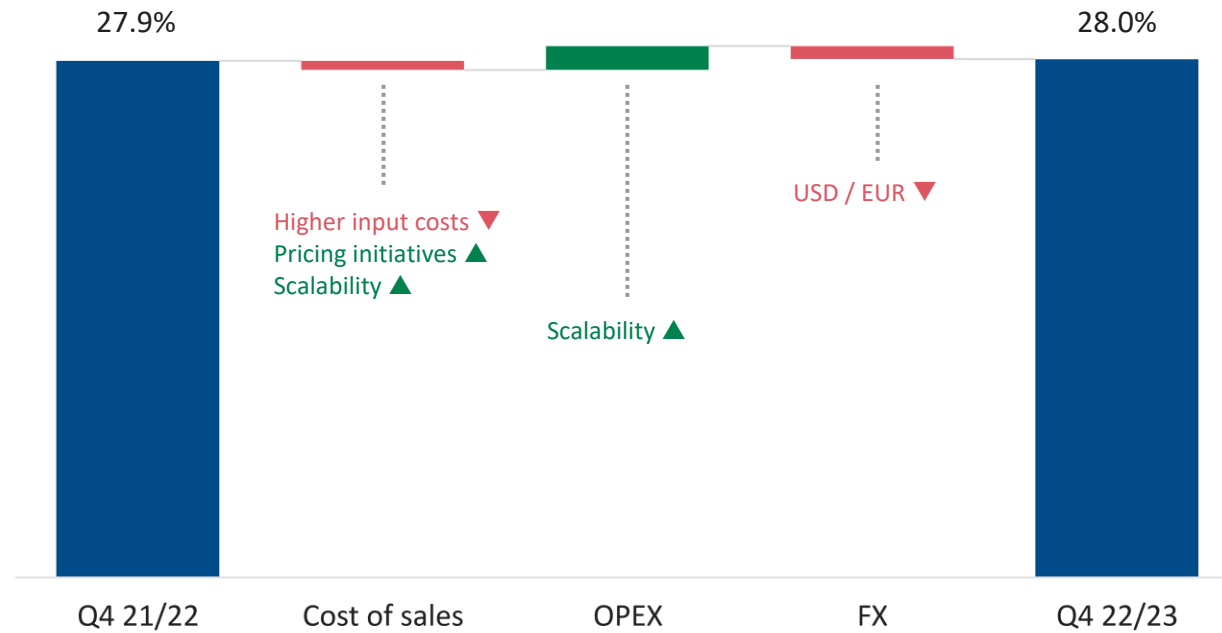
**CHR HANSEN**

*Improving food & health*

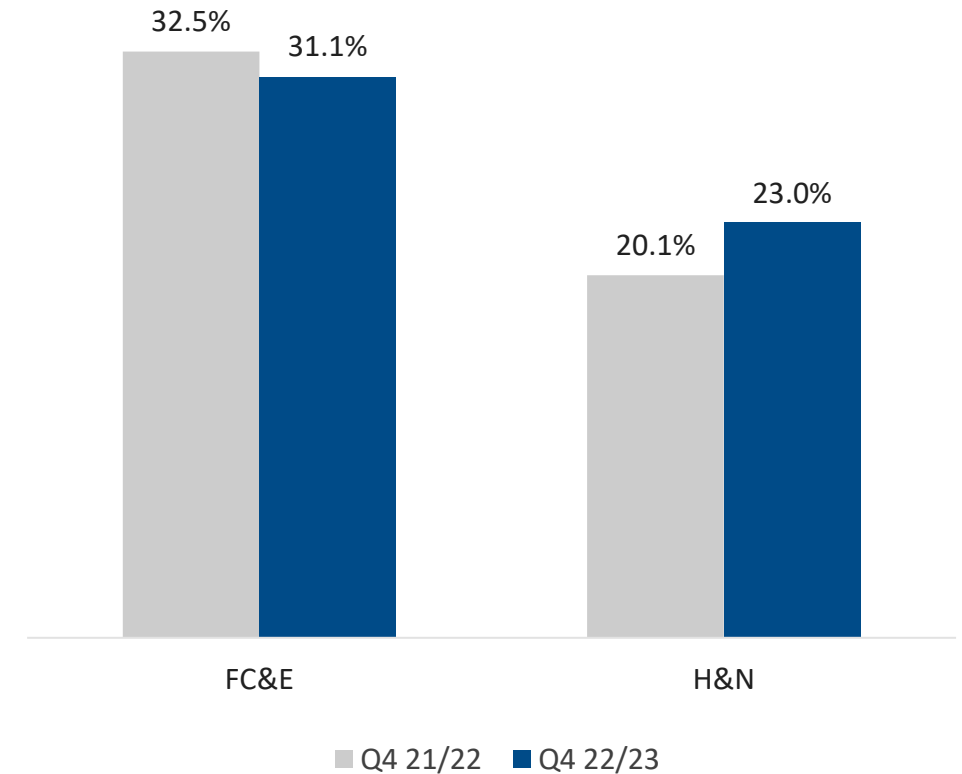
# Improved profitability driven by strong sales development and pricing

EBIT margin b.s.i. Q4 2022/23

GROUP EBIT MARGIN B.S.I. in %



SEGMENT EBIT MARGIN B.S.I. in %

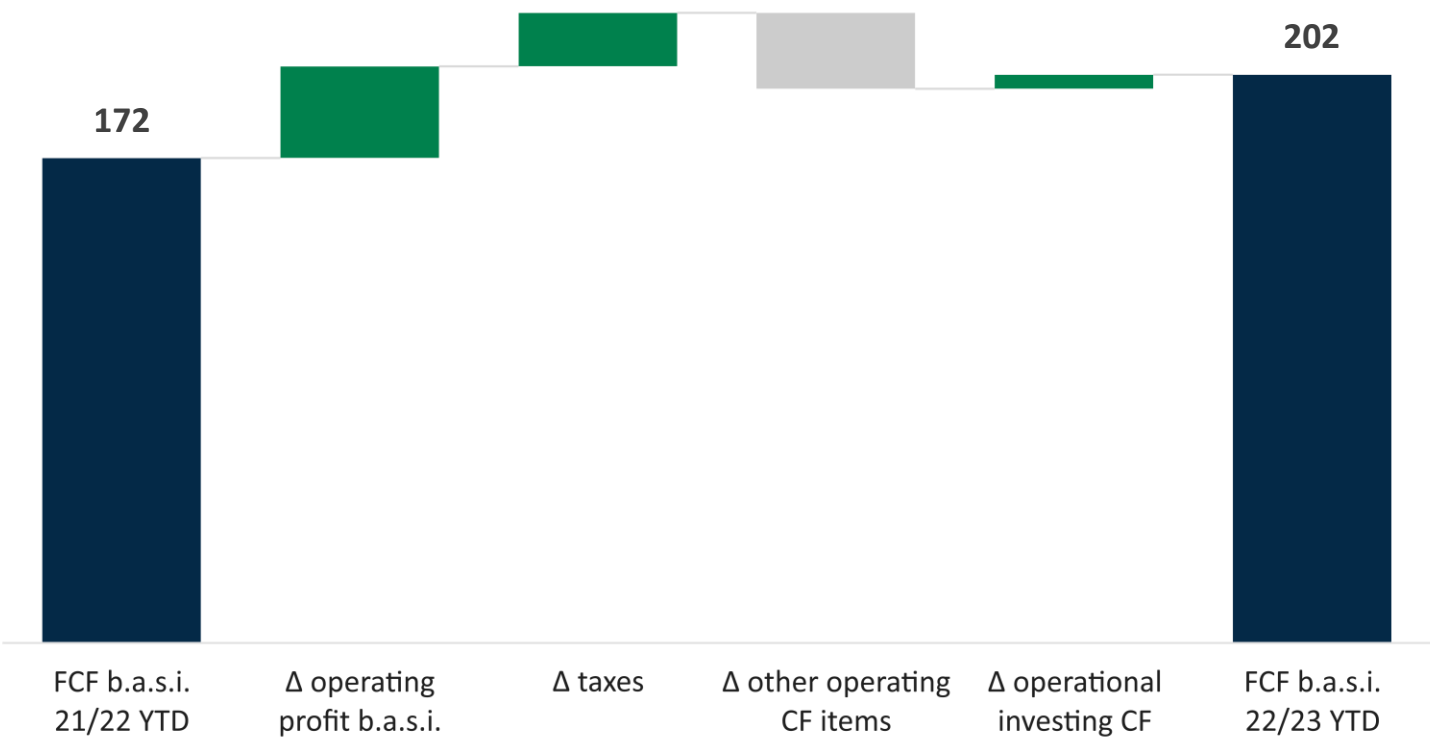





CHR HANSEN

*Improving food & health*

# Improved operating profit and less taxes paid, partly offset by higher working capital

FREE CASH FLOW B.A.S.I. in EURm






ROIC excl. goodwill in %		
	YTD 21/22	YTD 22/23
Group		
	24.0%	24.1%
FC&E		
	33.4%	32.3%
H&N		
	14.5%	15.6%



# Follow-up on 12-month outlook


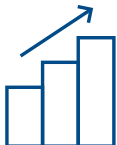

September 1, 2022 – August 31, 2023

	SEPT. 1, 2022 – AUG. 31, 2023	
	Actuals 2023	Outlook July 6, 2023
 <b>ORGANIC REVENUE GROWTH</b>	11%	9-11%
 <b>EBIT MARGIN b.s.i.</b>	26.9%	26-27%
 <b>FREE CASH FLOW b.a.s.i.</b>	EURm 202	EURm 200-230



# Outlook for calendar year 2023

In light of the performance for the first eight months of 2023, the outlook is adjusted for organic revenue growth and free cash flow b.a.s.i., while maintained for EBIT margin b.s.i.

	JAN. 1, 2023 – DEC. 31, 2023	
	Outlook October 12, 2023	Outlook July 6, 2023
 <b>ORGANIC REVENUE GROWTH</b>	<b>10-12%</b>	<b>9-12%</b>
 <b>EBIT MARGIN b.s.i.</b>	<b>26-27%</b>	<b>26-27%</b>
 <b>FREE CASH FLOW b.a.s.i.</b>	<b>EURm 190-230</b>	<b>EURm 200-250</b>

## ORGANIC GROWTH

- Organic growth for the remaining four months of 2023 is expected to be driven primarily by price growth including a positive impact from EUR-based pricing.

## SENSITIVITY

- Continued changes in the geopolitical and macroeconomic climate, including additional sanctions against Russia or other countries where Chr. Hansen operates, supply disruptions and developments in raw material and other input costs, such as energy, may impact the outlook for the remainder of 2023.
- The outlook for the calendar year 2023 is based on actual exchange rates until October 11, 2023, and for the remainder of the calendar year 2023 assuming constant exchange rates at the current level of EUR/USD rate of 1.06, compared to 1.09 at the time of the most recent outlook, provided on July 6, 2023.

# Novozymes and Chr. Hansen combination

Update on the progress to complete the proposed merger

## PROPOSED MERGER

- On March 30, the EGMs of Chr. Hansen and Novozymes approved the proposed combination with a significant majority
- The shareholders of Chr. Hansen also approved the change of financial year to follow the calendar year
- Since March 2023, the proposed merger has been cleared in the US, China, France (FDI), Italy (FDI), South Africa, Brazil and Turkey
- The completion of the combination remains subject to the satisfaction of an additional number of conditions set out in the merger plan, including certain additional regulatory approvals
- On October 10, Novozymes announced the operating model and Executive Leadership Team for the future combined company
- The completion of the combination is expected in the fourth quarter of the calendar year 2023 or the first quarter of the calendar year 2024

## INTERIM DIVIDEND

- The interim dividend covers the period September 1, 2022 – August 31, 2023.
- In connection with the merger agreement, Novozymes and Chr. Hansen have agreed on certain specific provisions in respect of distributions to their shareholders until completion of the proposed merger.
- Consistent with the merger agreement with Novozymes, the Board of Directors has decided to declare an interim dividend of DKK 7.72 or EUR 1.04 per share (ex-dividend date of October 13, 2023).
- The total dividend of EUR 137 million is equivalent to 55% of the adjusted profit for the period September 1, 2022 to August 31, 2023, and will be paid on October 17, 2023.



# Q&A

CHR HANSEN

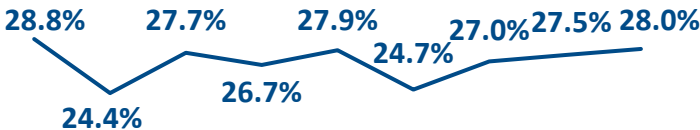
*Improving food & health*

# EBIT margin b.s.i. by segment

Quarterly development



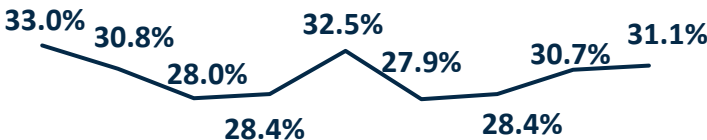
GROUP



Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		21/22				22/23		



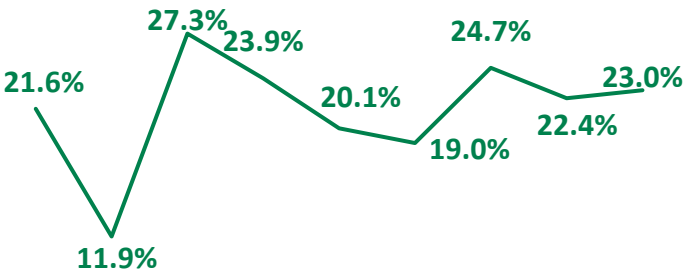
FOOD CULTURES & ENZYMES



Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		21/22				22/23		



HEALTH & NUTRITION



Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		21/22				22/23		



# What makes us stand out

## Equity story highlights



A leading bioscience player



Exposure to attractive growth areas supported by megatrends



Innovation-driven with focused microbial and fermentation technology capabilities



Sustainable products ('handprint')



Strong cash flow generation with clear capital allocation priorities

# Chr. Hansen is a microbial and fermentation technology leader



## FOOD CULTURES & ENZYMES

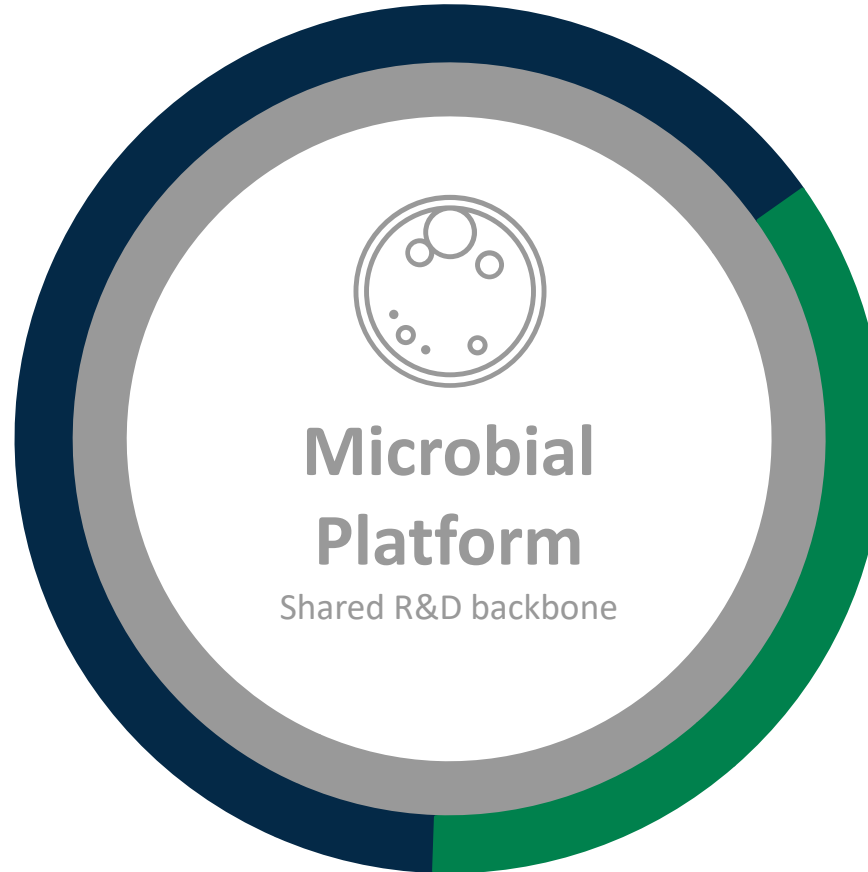
EUR 828m revenue  
(62% of total) in 2022/23



Dairy



Food &  
Beverages



## HEALTH & NUTRITION

EUR 506m revenue  
(38% of total) in 2022/23



Human Health  
& HMO



Animal &  
Plant Health

**CHR HANSEN**

*Improving food & health*

# We are the preferred partner

for strategic value-added ingredients



Quotes from customer survey

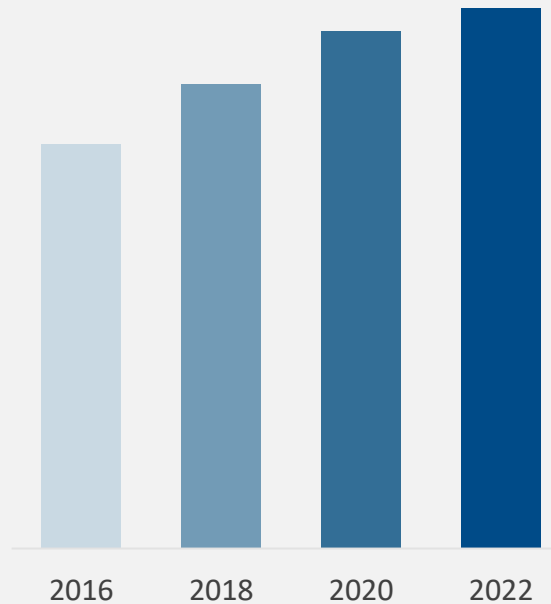
“The **quality of products is definitely the best** on the market.”

“We receive **excellent support from the technical team.**”

“Good professional team that goes beyond the traditional supplier - **always offering the best service**, speed of delivery and new market insights.”

## HIGH CUSTOMER SATISFACTION AND LOYALTY

Net Promoter Score®



## STRATEGIC INGREDIENT LOW COST – HIGH VALUE



Taste & texture  
Nutritional value  
Quality & consistency  
Pathogen protection  
productivity improvements

**1-5%**  
of cost



Health benefits  
Higher feed conversion  
Better crop yields

**>1-5%**  
of cost

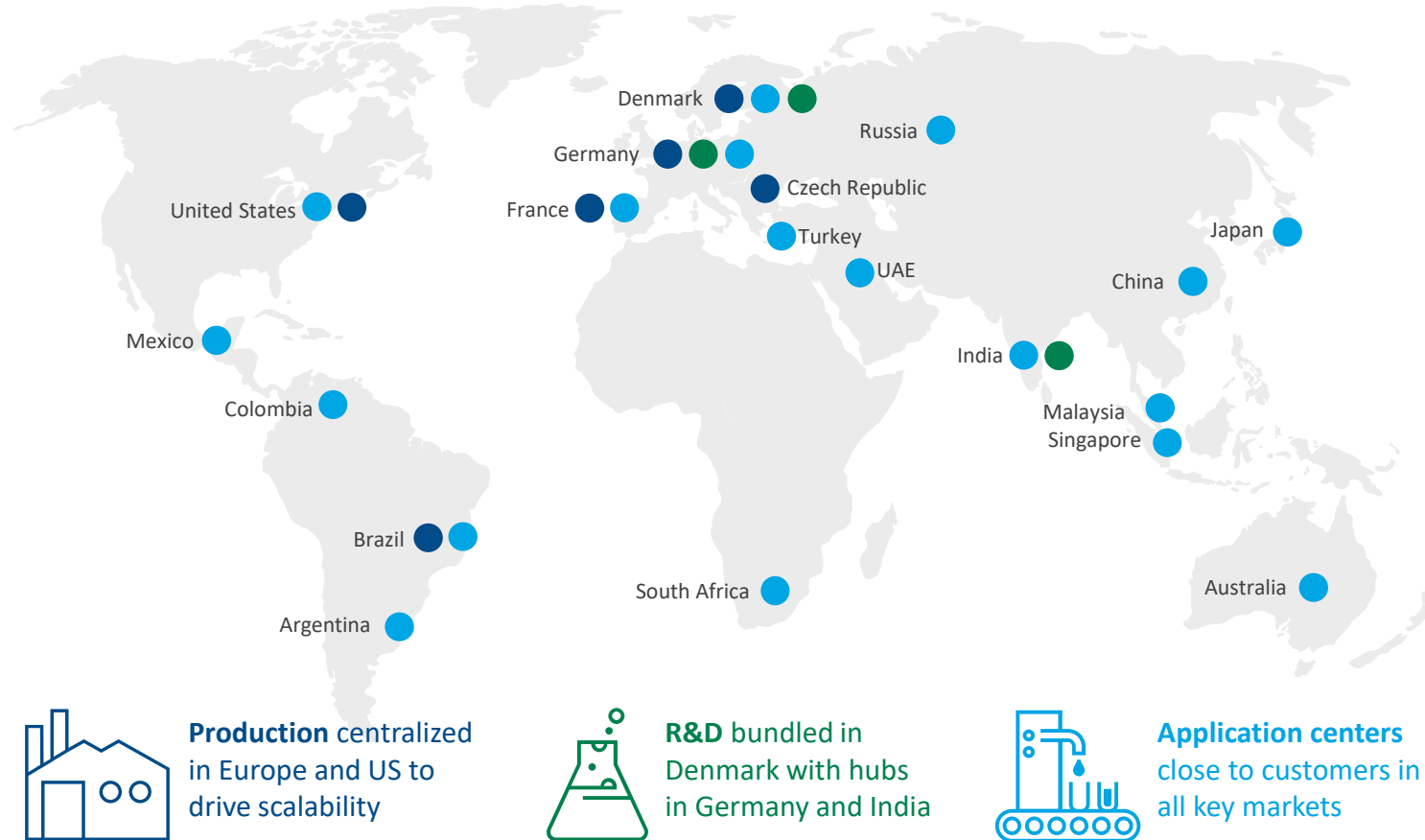
CHR HANSEN

*Improving food & health*

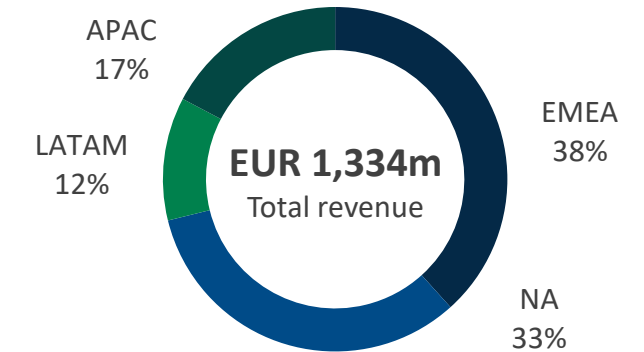
# We operate globally

with a centralized R&D and production set-up and a comprehensive network of application centers

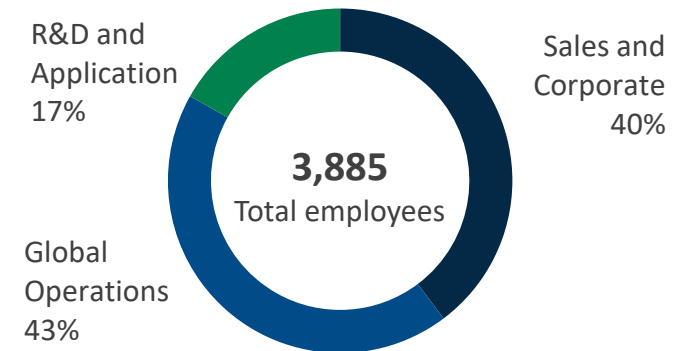
## GLOBAL FOOTPRINT AT A GLANCE



## REVENUE BY REGION 2022/23



## EMPLOYEES BY FUNCTION 2022/23



**CHR HANSEN**

*Improving food & health*

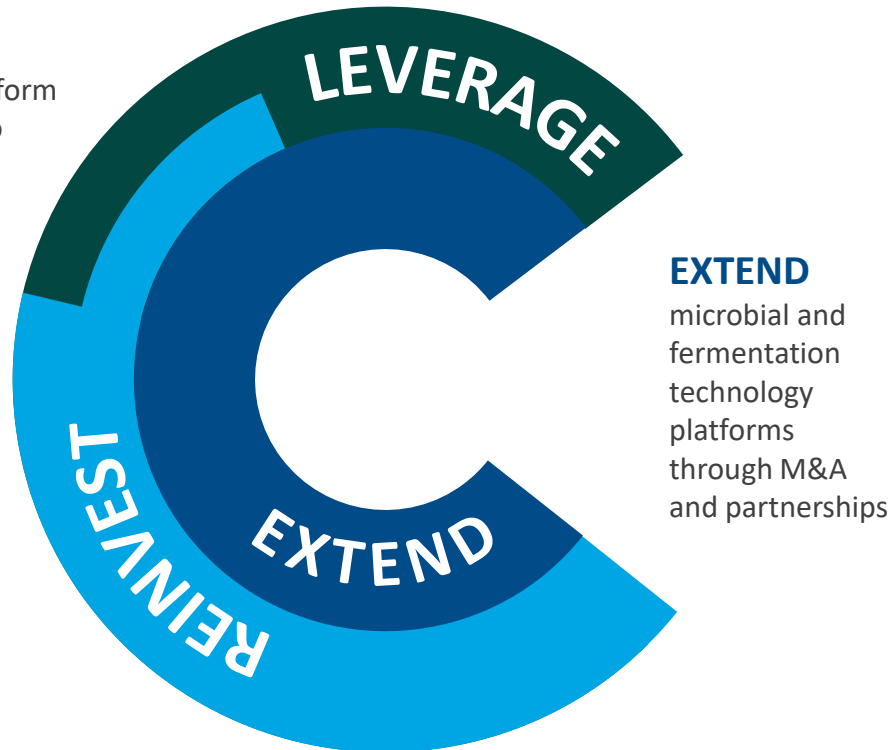
# 2025 Strategy: Creating a differentiated bioscience company

with focus on microbial and fermentation technology platforms to grow a better world. Naturally.

## Where to play

### LEVERAGE

Microbial Platform  
to expand into  
new areas



### REINVEST

in core platforms

## How to win

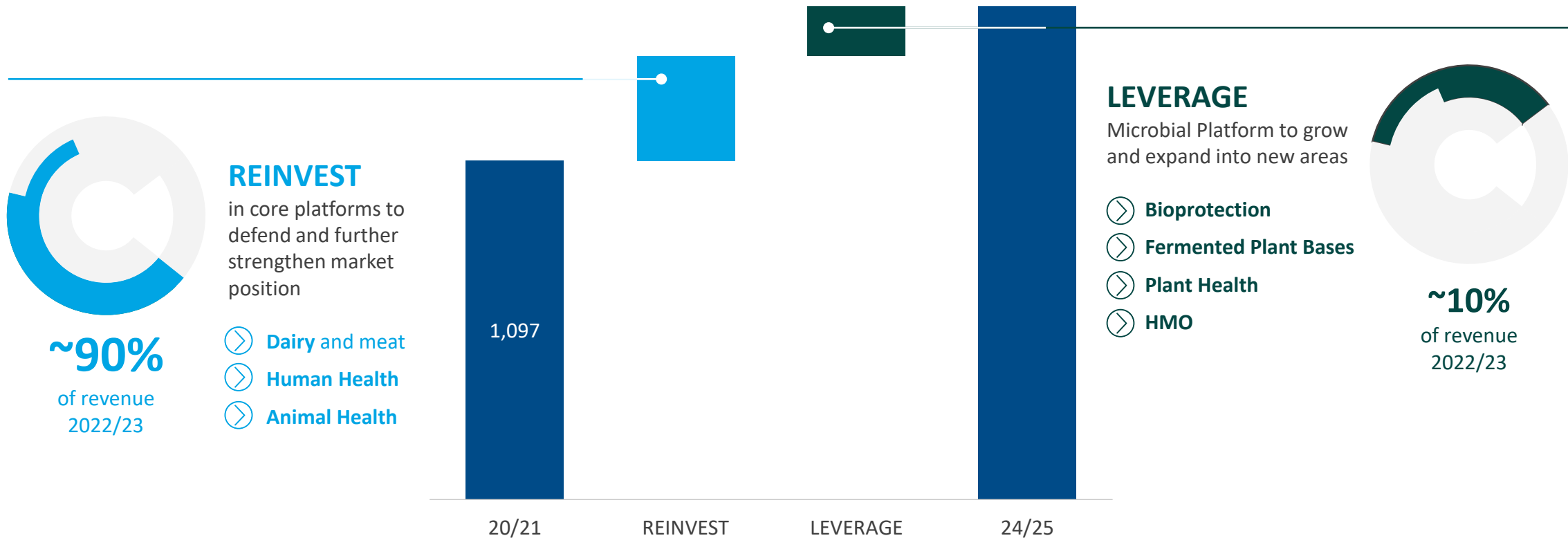
- 1 CUSTOMERS** Further expand customer base and global reach and excel in customer centricity
- 2 INNOVATION** Accelerate new product development and commercialization
- 3 OPERATIONS** Realize scalability benefits and operational efficiencies
- 4 PEOPLE** Safeguard culture and invest in talent management
- 5 PURPOSE** Grow a better world. Naturally.



# Core platforms will be the biggest absolute growth driver until 2025

while new growth areas are expected to grow faster than Group

## ABSOLUTE GROWTH DRIVERS UNTIL FY25



# We will continue to reinvest in our core FC&E business

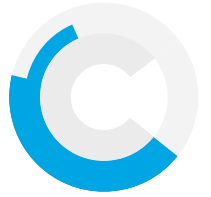
to bring new innovations to customers



Conversion in fermented milk  
~80% (potential: 90%) and in  
cheese ~55% (potential: 75%)

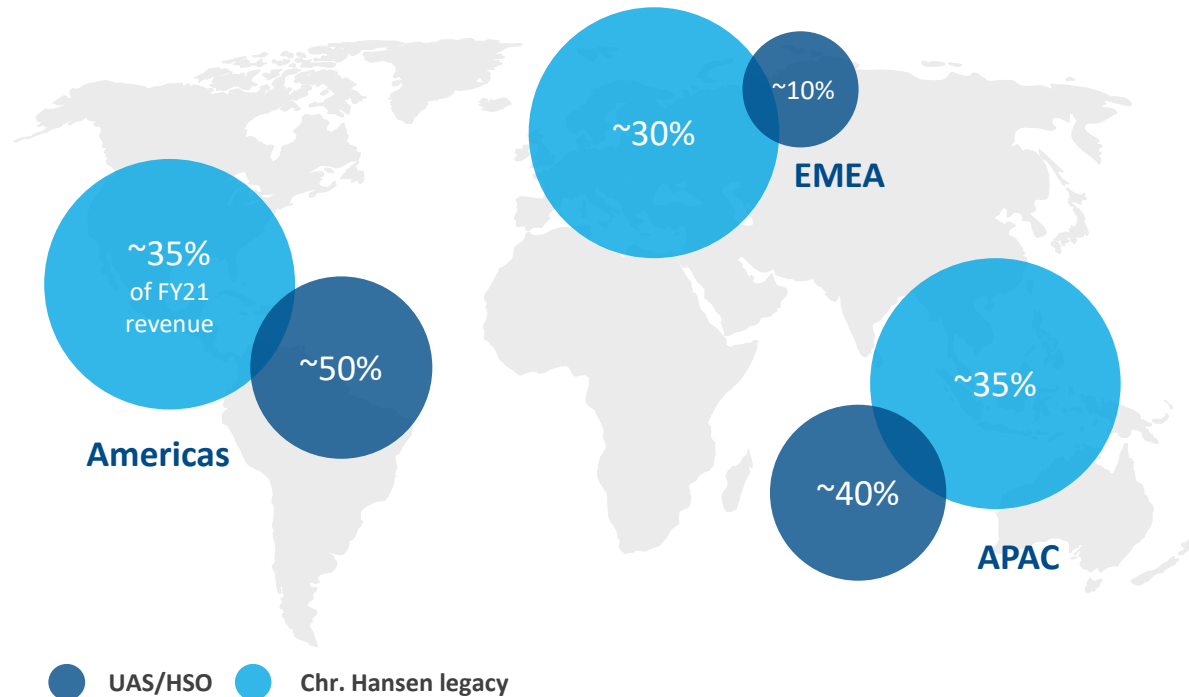
# Human Health is uniquely positioned after the acquisitions

to serve a broader customer base and realize synergies



**WE WILL LEVERAGE OUR GLOBAL COMMERCIAL CAPABILITIES TO ROLL OUT OUR PRODUCT OFFERING GLOBALLY....**

**... TO A BROADER CUSTOMER BASE IN DIFFERENT SEGMENTS, INDICATION AREAS AND CHANNELS**



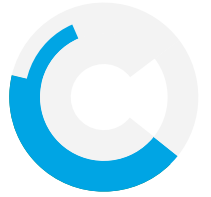
Market segment	Multi-speciesSingle-species		
Value proposition	Microbiome diversitySpecific health conditions		
Indication areas	Gut health, immune health, women's health, infant, novel indication areas		
Customer groups	E-commerce specialistsFMCG/CHCPharma		

**CHR HANSEN**

*Improving food & health*

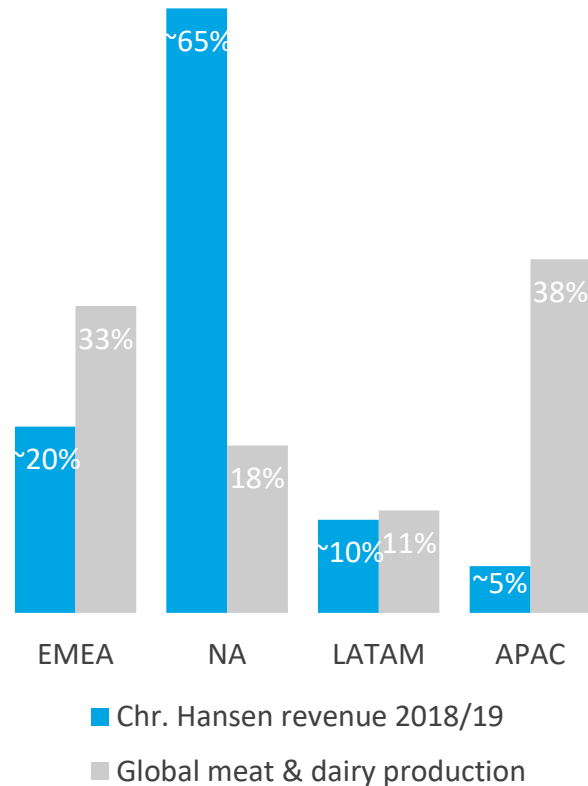
# In Animal Health we will continue to expand our presence

working with partners and direct accounts and rolling our products out globally



## EXPANDING OUTSIDE OF NORTH AMERICA

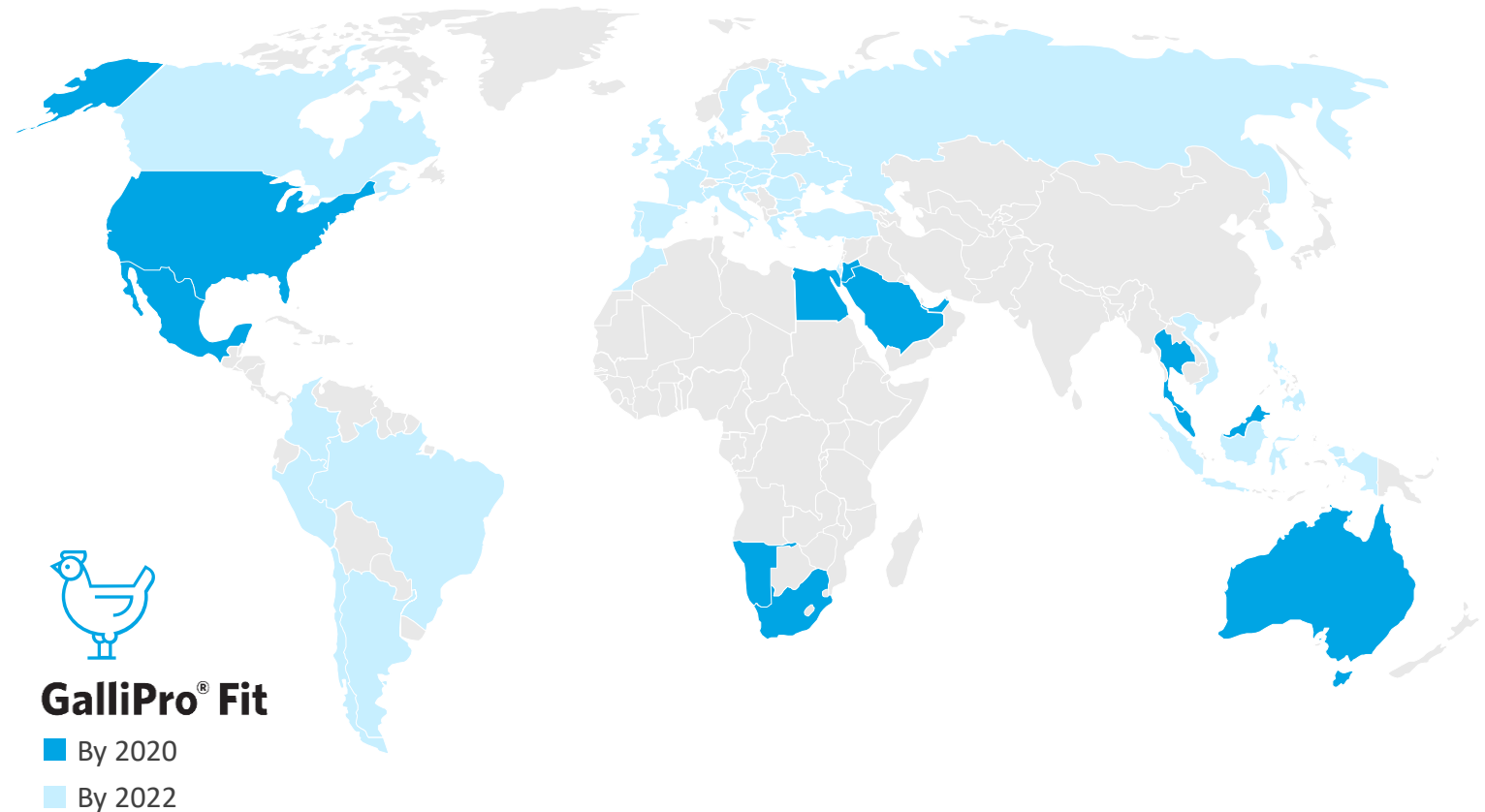
Animal Health revenue vs. global meat and dairy production volumes by regions<sup>1</sup>



<sup>1</sup> FAOSTAT (2018).

## GLOBAL ROLL-OUT OF PRODUCT PORTFOLIO

Example: Countries with (expected) registrations for GALLIPRO® Fit



CHR HANSEN

Improving food & health

# We leverage our technology platform to expand into new areas

and bring microbial solutions to food, health, pharma and farming sectors



## FOOD CULTURES & ENZYMES



### Bioprotection

Reduce food spoilage and increase food safety



### Fermented Plant Bases

'Fermented milk' alternatives and fermented beverages



### Plant Health

Microbial crop protection for more sustainable farming



### HMO

Prebiotics for infant formula



### Live Biotherapeutics

Contract development and manufacturing for live biotherapeutics

**CHR HANSEN**

*Improving food & health*



# High growth in HMO market

will be driven by consumer demand for 'close-to-nature' infant formula and increasing scientific evidence



## STRONG UNDERLYING GROWTH DRIVERS



### 2020

- Acquisition of Jennewein with EUR 19m revenue in FY21 and ~120 employees
- Pioneer in HMO manufacturing with highly cost-competitive and IP protected downstream process



### 2021-22

- Establishment of HMO as separate, full value chain under H&N
- Production expanded to secure capacity short-term
- New Applied HMO team established, and R&D center inaugurated
- New regulatory approvals for HMO in Europe, North America and Israel



### 2022-25

- Expand manufacturing capacity; scale a key driver for HMO business to break even
- Secure regulatory approval of HMOs in China and registration of 5HMO mix for several markets

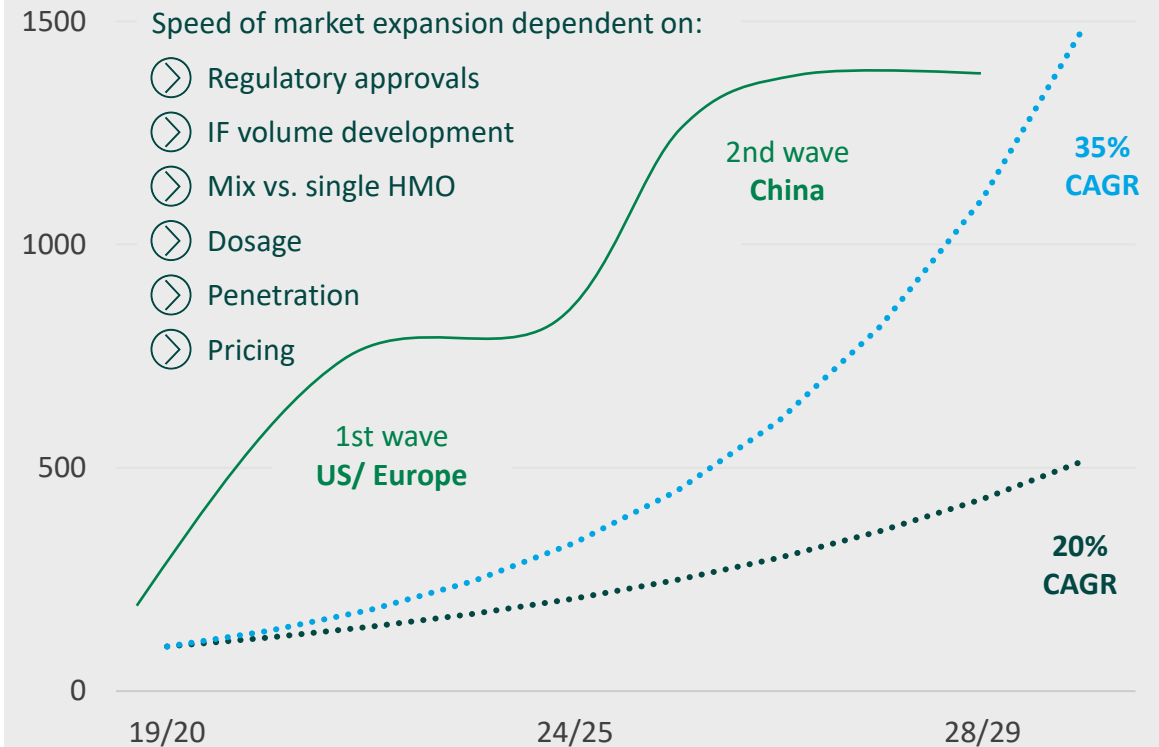


### Beyond 25

- Expand manufacturing capacity
- Bring next generation HMOs to market
- Explore applications beyond infant formula e.g., supplements
- Develop synbiotics

## HMO MARKET EXPANSION DEPENDENT ON SEVERAL FACTORS

Addressable market in EURm (illustrative)



CHR. HANSEN

Improving food & health



# Exposure to attractive growth areas supported by megatrends



## SUSTAINABLE AGRICULTURE



## BETTER FOOD PRODUCTION



## IMPROVED HEALTH



Natural plant protection



Better quality silage



Animal nutrition



Quality and safety



Efficient production



Less waste



Healthier food



Supporting health



Next generation health



# Our microbial solutions enable a more sustainable food system from farm to fork and contribute positively to the global health agenda

## GLOBAL CHALLENGE<sup>1</sup>

<b>GROWING POPULATION</b>	<ul style="list-style-type: none"><li>• +50% protein needed to feed 10bn in 2050</li><li>• Growing consumerism in emerging markets</li></ul>
<b>RESOURCE SCARCITY</b>	<ul style="list-style-type: none"><li>• 75% of agricultural land used to produce 1/3 of protein</li><li>• 1/3 of food is wasted</li></ul>
<b>CLIMATE CHANGE</b>	<ul style="list-style-type: none"><li>• Industrialized animal ag stands for 15% of global emissions</li><li>• Global food system key driver for biodiversity loss</li></ul>
<b>RISING HEALTH COSTS</b>	<ul style="list-style-type: none"><li>• Number of people age 65+ to double by 2050</li><li>• Chronic diseases account for &gt;50% of deaths worldwide</li><li>• Antimicrobial resistance top 10 global public health threat</li></ul>

## MICROBIAL OPPORTUNITY

 Increase dairy efficiency	 Prevent food contamination
 Better feed conversion in livestock	 Less antibiotic growth promoters
 New plant-based foods with lower carbon footprint	 Alternatives to chemical crop protection
 Healthier food – less sugar, salt, lactose and fat	 Health through nutrition – HMOs and probiotics

<sup>1</sup> Sources: Good Food Institute, AMR, WHO, UN.

# Our microbial solutions help the agricultural industry become more efficient

with solutions that improve productivity and make more out of less

## DAIRIES ARE INCREASINGLY CHALLENGED BY

- Rising raw material costs
- Rising energy costs
- Rising milk prices
- Rising labor costs



### CHY-MAX® S / YIELDMAX®

- Helps cheese makers achieve higher yield of up to 1%
- Enables faster and more precise production

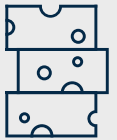


### YOFLEX® PREMIUM

- Allows protein savings of 3-4% by reducing unnecessary ingredients such as skim milk powder equal to 1-3% in COGS

## EXAMPLE OF A CHEESE PRODUCER USING CHY-MAX® SUPREME

- Yield increase of up to **1.5%**<sup>1</sup>
- Faster and more efficient production
- Extension of shelf-life



- The cheese producer achieved yearly cost savings of **960,000 EUR**<sup>1</sup>



<sup>1</sup>The cheese producer has a yearly production of 16,000 tons. The cheese price is 4,000 EUR per ton.

# Innovation-driven

with focused microbial and fermentation  
technology capabilities



Nearly 150 years of experience in  
microbial science



One of the industry's largest culture  
collections with +50,000 strains



Mastering complexity with +400  
strains produced at industrial scale



~8% of revenue spent  
on research and development





# Chr. Hansen is a microbial powerhouse

with leading capabilities across the entire R&D value chain

## ANALYTICAL SOLUTIONS, EMERGING TECHNOLOGIES & PORTFOLIO MANAGEMENT



### DISCOVERY



### CULTURE DEVELOPMENT



### APPLICATION



### PROCESS DEVELOPMENT

From genotype...  
...to phenotype

- Maintain, expand and improve culture collection
- Strain characterization to identify applications
- Strain customization via classical improvement techniques (no GMO)

From strain...  
...to culture

- Identify how many and which strains compose a culture (combinatorial microbiology)

From culture...  
...to product

- Operate application centers
- Provide daily technical support to customers
- Know how microbes work in different foods, human and animal guts, plants and soils

From sample size...  
...to industrial scale

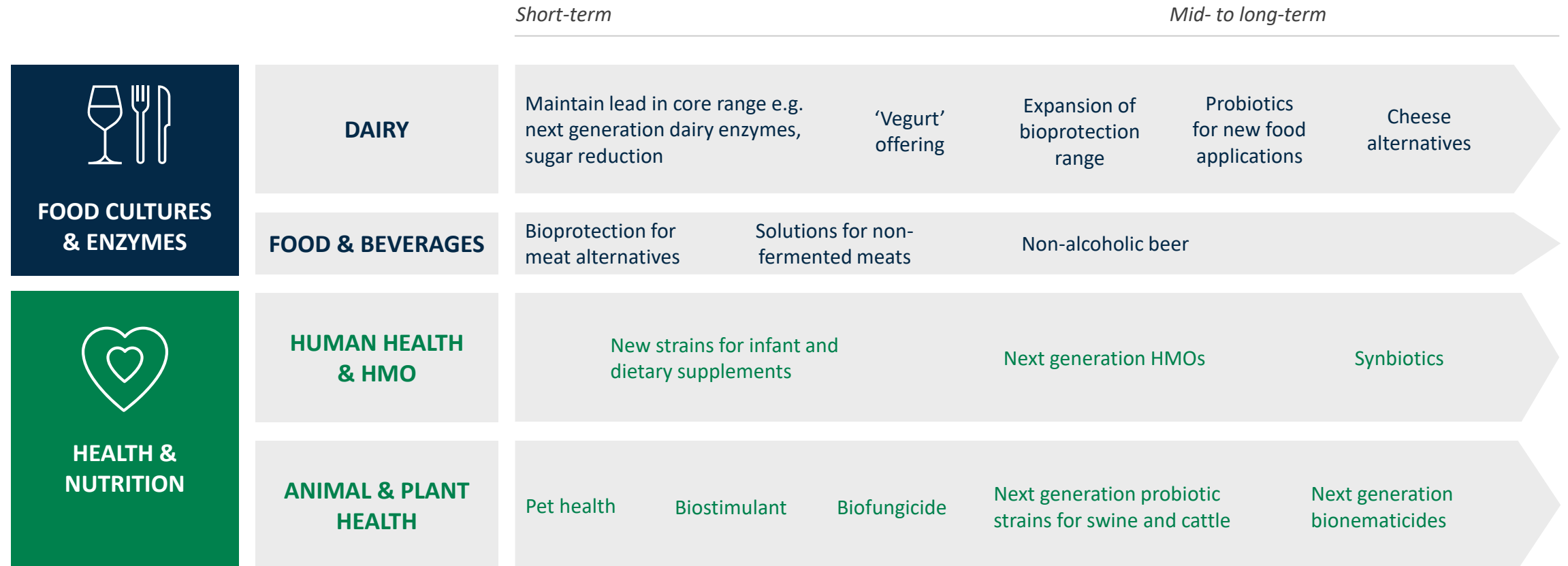
- Develop manufacturing processes e.g. upscaling for ONE industrial platform
- Drive productivity and efficiencies together with Global Operations
- Microbial stability programs
- Run pilot plants and produce all inoculation materials worldwide

CHR. HANSEN

*Improving food & health*

# Strong and well-balanced R&D pipeline

to drive growth during strategy period until 2025 and beyond



# Sustainable products



Ranked as a leader  
in sustainability by  
Corporate Knights

**>1 billion**

People consume  
a product with a Chr. Hansen  
ingredient every day

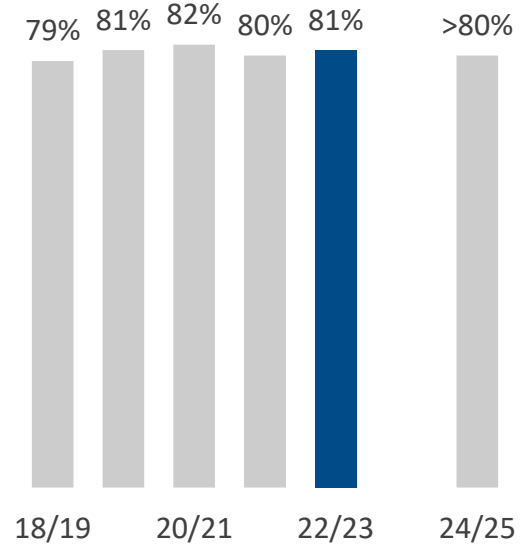
**81%**

Of our revenue contributing  
positively to the United Nation's  
Sustainable Development Goals

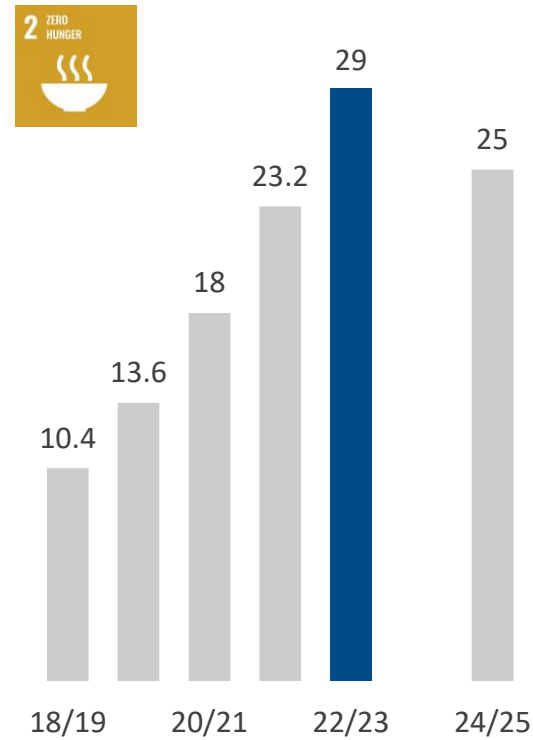
# 81% of our revenue contribute to the Sustainable Development Goals

as per our annual product mapping which is assured by PwC<sup>4</sup>

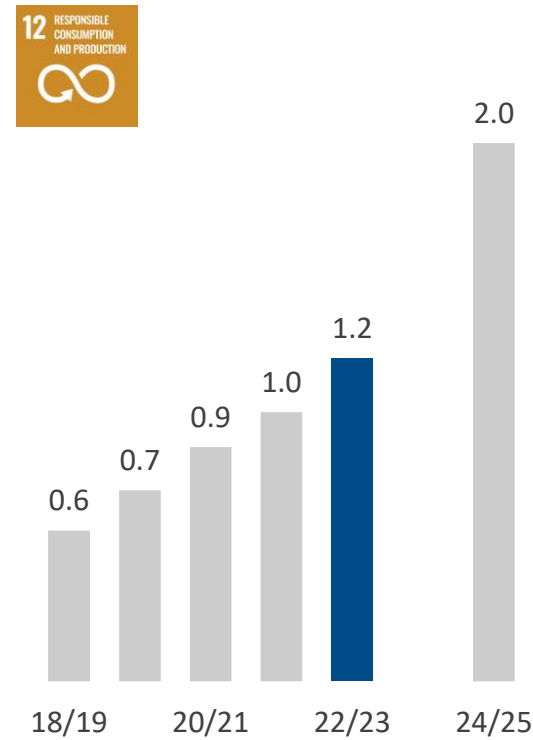
## CONTRIBUTION TO UN GLOBAL GOALS in % of gross revenue



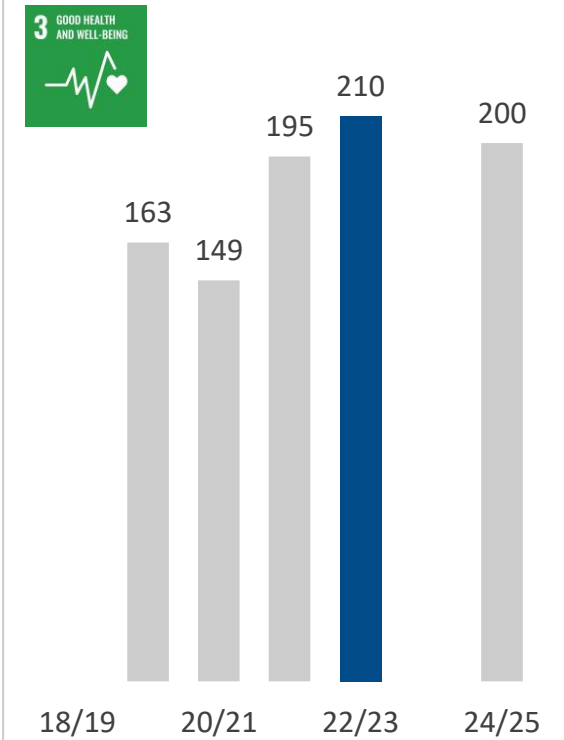
## FARMLAND TREATED WITH NATURAL SOLUTIONS<sup>1</sup> in m ha



## YOGURT WASTE SAVED<sup>2</sup> in m tons



## PROBIOTICS CONSUMED in m people<sup>3</sup>



<sup>1</sup> Includes Plant Health and Animal Health silage inoculants.

<sup>2</sup> Figures have been recalculated in FY21 based on a minor adjustment of the methodology.

<sup>3</sup> New KPI was introduced in FY21.

<sup>4</sup> The figures for FY23 have not been assured by PwC.

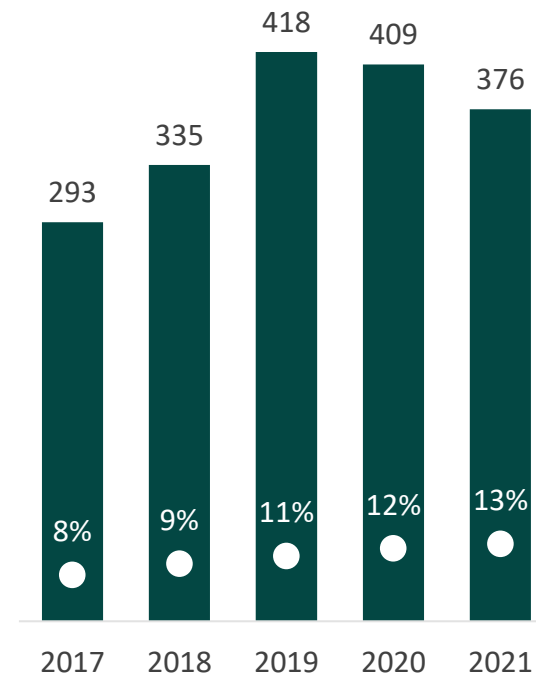


# Consumer demand for plant-based remains high

but taste is the key barrier the industry needs to overcome to go mass market

## LAUNCH ACTIVITY REMAINS HIGH BUT VOLUMES ARE SMALL...

Global 'vegurt' launches and share of total launches in yogurt category<sup>1</sup>



<sup>1</sup> Mintel (Dec 2021).

<sup>2</sup> FMCG Guru (2021).

## ... DUE TO PRODUCT QUALITY

Share of active consumers<sup>2</sup>

# 40%

struggle to give up dairy and meat as products do not live up to expectations

# 70%

of consumers would be willing to eat more plant-based foods if they tasted better than they do today

**CHR HANSEN**

*Improving food & health*

transforming proteins into great food and beverages products – no matter which protein base

MILK BASES		MEAT BASES		PLANT BASES		
Fermented milk	Cheese	Fermented meat	Other meats & fish	Dairy & meat 'alternatives'	Ready-to-eat salads	Fermented beverages
FERMENTATION for texture, taste, other (e.g. sugar reduction)						
BIOPROTECTION for shelf-life extension and food safety						
PROBIOTICS for gut health & immunity						
ENZYMES for coagulation, lactose & sugar reduction, productivity (e.g. yield)						

**CHR. HANSEN**  
Improving food & health

# Sustainability as an additional enabler for margin expansion

Our decarbonization roadmap towards 2030

## 2030 SCIENCE BASED TARGETS



**42%**

reduction target for scope 1+2



**20%**

reduction target for scope 3

## THINK CLIMATE. NATURALLY. INITIATIVES



### OPERATIONS

- Convert all sites to 100% renewable electricity
- Work smarter with heat supply
- Sustainable refrigerants
- Recyclable packaging
- Optimize waste management



### SOURCING

- Approach selected suppliers for low-carbon practices incl. conversion to renewable energy
- Optimize use of raw materials via process innovations



### LOGISTICS

- Optimize transition from air to sea or road freight
- Explore low-carbon fuels in dialogue with freight forwarders



### ENGAGEMENT

- Promote climate literacy amongst employees
- Crowdsource climate smart ideas

**CHR HANSEN**

*Improving food & health*



# Executive compensation closely aligned with shareholder interests

– strong incentive component

## SHORT TERM: ANNUAL INCENTIVE PROGRAM FOR CEO AND CFO

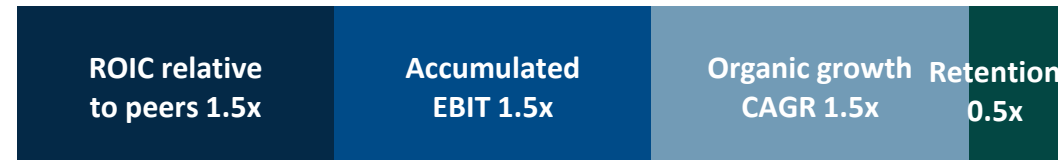
- Based on group financial and non-financial targets
  - 20% of annual bonus linked to ESG (KPIs related to customer service, quality, diversity, safety and sustainability)
- Bonus is paid as a minimum 1/3 in Restricted Stock Units and 2/3 in cash; normally accounts for 20-25% of total remuneration package



In % of fixed pay <sup>1</sup>	Target	Max
CEO	70%	100%
CFO	50%	71%

## LONG TERM: PROGRESSIVE THREE-YEAR INCENTIVE PROGRAM

- Requires personal investment in Chr. Hansen shares to participate
- Grant value estimated at 25-30% of the remuneration package
- Vest in full after three years



Target matching shares per investment of one share

In % of fixed pay <sup>1</sup>	Target	Max
CEO	80%	120%
CFO	60%	90%

<sup>1</sup> Base plus pension.



# Contacts

**Anders Mohr**

Vice President Group Strategy & Investor Relations

+45 25 15 23 64

[DKAMC@chr-hansen.com](mailto:DKAMC@chr-hansen.com)

**Disa Tuominen**

Investor Relations Manager

+45 60 38 58 26

[DKDITU@chr-hansen.com](mailto:DKDITU@chr-hansen.com)

**CHR HANSEN**

*Improving food & health*