



# The Novozymes Report 2022



Novozymes A/S  
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Krogshøjvej 36, 2880 Bagsvaerd, Denmark  
Novozymes Annual Report 2022

**Rethink Tomorrow**

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*“Novozyymes stands on a solid foundation. We have delivered strong growth and earnings in a volatile market environment by leveraging the strength of our well-diversified portfolio, unique production capabilities and broad market presence.”*

[Click to read the Message from the Chair and the CEO](#)



*Our strategy “Unlocking growth – powered by biotech” is more relevant than ever. It is rooted in our unique ability to use the power of biotech to address some of the world’s biggest challenges while unlocking sustainable growth.*

[Click to read highlights from our strategy](#)

## Our reports

Explore the highlights of The Novozymes Report 2022 online – [report2022.novozymes.com](https://report2022.novozymes.com)

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Remuneration Report 2022

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# The big picture

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# Novozymes at a glance

Novozymes is the world leader in biosolutions. We use the power of biotech to help our customers grow their businesses while preserving the planet's resources and enabling better lives.

Read more about our business model on our website.

Visit [↗](#)

Market leader with more than **700 biosolutions** that are inspired by nature

Driven by innovation with **~11% of total revenue** invested in research and development, and **26 biosolutions launched** in 2022

One of the first companies in the world to have its **net-zero target validated** by the Science Based Targets initiative

Enabled savings of **65 million tonnes of CO<sub>2</sub>** in global transportation in 2022 – equivalent to taking 27 million cars off the road.

Broad-market presence across more than **30 industries in 140 countries**

More than **6,700 employees** across 33 countries

TOGETHER WE  
FIND BIOLOGICAL  
ANSWERS FOR BETTER  
LIVES IN A  
GROWING WORLD  
LET'S RETHINK  
TOMORROW

*Our purpose is at the heart of who we are and the guiding principle for the way we do business. It looks ahead to everything we aim to accomplish together with our customers, consumers, governments, academia and many others around us. We live up to our purpose by delivering on our strategy while staying true to our values.*



# Performance highlights

## Nonfinancial

# 63%

Absolute CO<sub>2</sub> emissions reduction from operations

# 100%

Circular management of biomass

# 83

Employee engagement - Zymer Spirit Index

# 86

Gender and international representation - Nurture Diversity Index

## Financial

# 9%

Organic sales growth

# 26.0%

EBIT margin

# 26.4%

Before special items\*

# 1.1

 DKKbn

Free cash flow before acquisitions

# 17.6%

ROIC\*\*

# 17.9%

Before special items\*

\* Special items include costs related to the proposed combination with Chr. Hansen.

\*\* Including goodwill.

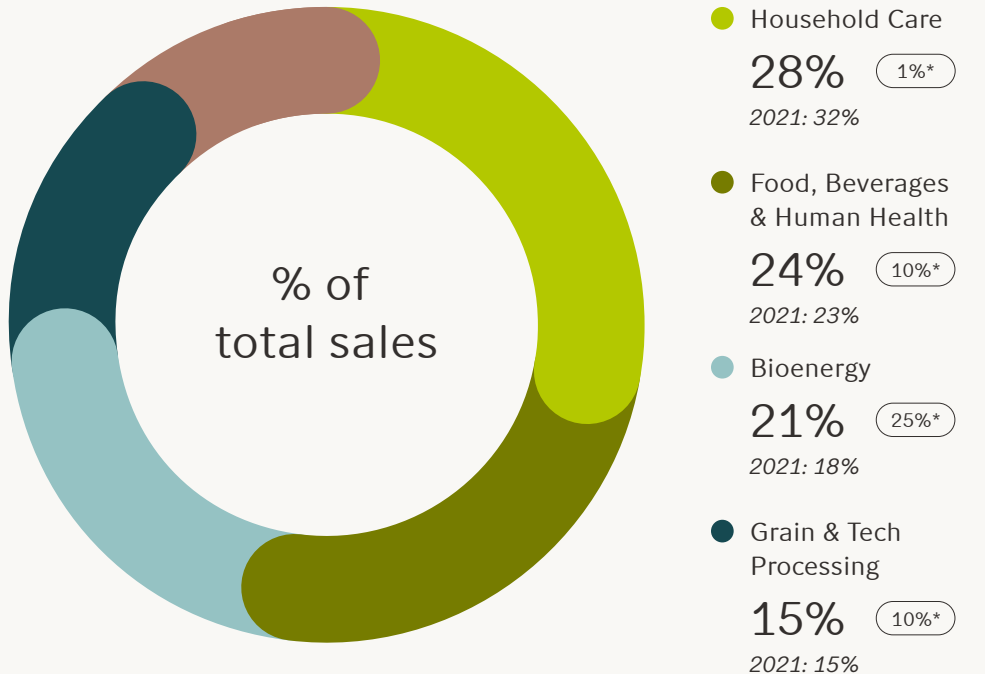
	2022 Target	Realized
Reduce absolute CO <sub>2</sub> emissions from operations (scope 1+2) from a 2018 baseline	40%	63%
Circular management of biomass	100%	100%
Nurture Diversity Index	86	86
Zymer Spirit Index	81	83

See details on all nonfinancial targets in [Targets & outlook](#)

		Initial 2022 outlook	Latest 2022 outlook	Realized
Organic sales growth	%	3 to 7	8 to 9	9
EBIT margin	%	25 to 26	26 to 27	26.0
ROIC**	%	16 to 17	17 to 18	17.6
Free cash flow before acquisitions	DKKbn	1.7 to 2.1	1.3 to 1.7	1.1

See more details in [Accounts and performance](#)

# Sales by business area



We saw double-digit growth across three out of five business areas in 2022: Bioenergy, Food, Beverages & Human Health and Grain & Tech Processing. We also saw solid growth in Agriculture, Animal Health & Nutrition, while Household Care performed in line with expectations.

\*Organic sales growth

# Sales by geography

## Europe, the Middle East & Africa

Organic sales for the full year grew 6%, driven by strong performances in Agriculture, Animal Health & Nutrition, Bioenergy and Food, Beverages & Human Health, while Household Care declined, due to the soft volume developments in Europe and the impact from the war in Ukraine.

## Asia Pacific

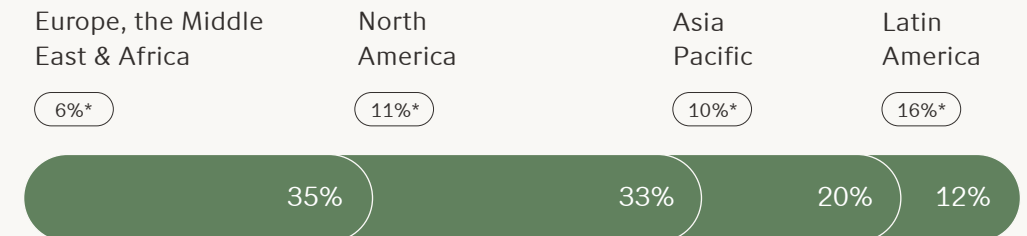
Organic sales for the full year grew 10% in 2022 compared to the previous year with all five business areas contributing positively. Performance was especially strong in Food, Beverages & Human Health, growing double-digit.

## North America

Full-year organic sales in North America increased by 11% in 2022 compared to the previous year. Bioenergy and Grain & Tech Processing were the main drivers of growth, while Agriculture, Animal Health & Nutrition was soft.

## Latin America

Sales in Latin America increased by 16% organically for the full year in 2022 with broad-based growth across business areas. Performance was especially strong for Bioenergy.



% of sales

\*Organic sales growth

# Household Care



## 2022 performance

In 2022, Household Care sales grew 1% organically and 5% in reported DKK. The performance was in line with expectations and the growth indication from the beginning of the year, adjusted for the negative impact of the war in Ukraine. Emerging markets performed well, growing primarily from increased penetration. In developed markets, sales were flat due to the volume softness in Europe, whereas North America grew. The Freshness platform performed broadly in line with expectations, and the recently launched exclusive partner solution provided additional traction despite general volume softness in the European detergent market.

## Product launches

- *Carezyme® Essential* – a solution designed for fabric softeners that helps garments stay newer for longer through fabric care benefits, which can help reduce textile waste.

- *Carezyme® Elite* – a solution for liquid detergents that improves fabric care and longevity, while maintaining powerful stain removal.
- *Progress Crystal* – a solution for soap bars that enables consumers to achieve a great washing performance, even if the soap bars are stored over long periods of time. The biodegradable enzymes enable less use of water during washing and help reduce water pollution to nearby water streams.

## Key trends

- Growing consumer focus on convenience, online shopping and reducing the use of plastics, leading to a transition from bulky powder and liquid laundry detergents to compact solutions.
- Strong industry and consumer focus on sustainability, energy reduction and cost savings, creating a pull for more bio-based laundry detergents that enable lower temperature washing with biodegradable ingredients.

- Pull for innovation to drive performance and differentiation in the laundry industry, e.g. across deep-cleaning, fabric care, freshness and malodor prevention.

## SDG impact

Our biosolutions in Household Care for laundry, dishwashing, and cleaning are used by more than half of the world's population. They ensure strong cleaning performance while reducing the consumption of water, energy and chemicals.



Learn more about our work with the Sustainable Development Goals on our website.

Visit [↗](#)

## Shrinking the carbon footprint of laundry



Laundry detergents are largely made of fossil-derived chemical ingredients, which contribute to a detergent's carbon footprint. Novozymes' biosolutions can partially replace these chemicals.

We can cut the level of surfactants by 30% in a standard detergent with a blend of enzymes and still achieve a great washing performance. The enzymes enable stain removal, whiteness, freshness, color and fabric care.

*“If we are serious about achieving climate-neutrality, we need high-performing, affordable bio-based detergents that can go mainstream, and we have solutions ready to go.”*

– Sandra Friis-Jensen, Marketing Director, Biological Detergents, Novozymes.

Find sources and insights on how biosolutions can make laundry greener on our website.

Visit [↗](#)



# Food, Beverages & Human Health

## 2022 performance

Food, Beverages & Human Health grew 10% organically and 19% in reported DKK. Growth was broad-based, with all subareas performing very well in both developed and emerging markets, with particularly strong performance in Latin America and Asia Pacific.

Growth in Food was driven by innovation, optimization of raw materials and penetration in emerging markets with solutions such as fresh-keeping, sugar reduction and plant-based protein extraction. Additionally, Beverages performed very well, particularly in emerging markets, benefiting from similar trends of raw material optimization, increased use of locally sourced materials and stronger demand for low-carb beer. Performance in Human Health was solid with underlying double-digit growth, driven by cross-selling of solutions as well as geographical expansion.

## Product launches

- *Valena Pulse G* – a solution that helps meet consumer demand for protein- and fiber-rich breads. It enables better inclusion of pulse ingredients, such as chickpeas, in breads while maintaining appearance and the eating experience that consumers expect.
- *BioFresh™ Clean* – a unique enzymatic combination that enables consumers to clean and protect teeth and maintain a healthy oral microbiome.

## Key trends

- Growing consumer focus on food, beverages and supplements that enhance nutrition, health and well-being.
- Increased consumer interest in plant-based alternatives to enable a healthier and more sustainable lifestyle.
- Attention to using locally produced raw materials due to an increased focus on sustainability and supply chain issues.



- Stronger push for innovative biosolutions due to requirements for quality, taste, texture, freshkeeping and clean labels in food and beverages.
- Increased consumer focus on immunity and ways to proactively manage one's health following the COVID-19 pandemic.

## SDG impact

Our biosolutions in Food and Beverages lower the environmental footprint of food production and consumption by reducing food waste and enabling the use of local raw materials. Our proactive and preventative biosolutions in Human Health enable consumers to live healthier lives.



Learn more about our work with the Sustainable Development Goals on our website.

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## Reducing food waste one loaf at a time



The annual carbon footprint of food waste and loss is 3.3 billion tonnes, and much of the world's food waste comes from households.

Our biosolutions help keep baked goods fresher for longer, which helps reduce food waste. For example, our Novamyl® family of fresh-keeping solutions have saved an estimated 80 billion loaves of bread from being thrown away – that's an estimated saving of 45 million tonnes of CO<sub>2</sub>. If stacked up, those loaves would reach to the moon and back ten times.

*“Climate and food systems are inextricably linked. With solutions to increase the shelf-life of baked goods, we can help reduce food waste and thereby ease the overall demand on food systems.”*

– Adam Diggie, Business Unit Director, Baking, Novozymes.

Find sources and insights on how biosolutions can cut carbon emissions from bread on our website.

Visit [↗](#)

# Bioenergy

## 2022 performance

Bioenergy sales grew 25% organically in 2022 and 39% in reported DKK. The strong performance was driven by a broad and innovative solution toolbox allowing for higher yields, throughput, and by-product value capture for producers in a favorable market environment. The North American market experienced strong developments overall, supported by a roughly 2% increase in U.S. ethanol production in 2022, according to the U.S. Energy Information Administration (EIA). Performance was also strong outside of North America, driven by innovation, capacity expansion of corn-based ethanol production in Latin America and supported by growth in solutions for biodiesel production. In addition, sales of enzymes used in second-generation biofuels, commonly referred to as biomass conversion, contributed to growth.

## Product launches

- *Innova® Apex* – the industry's most robust, high-yielding advanced yeast designed for ethanol fermentation times of 52-65 hours. The solution resets the

industry benchmark by combining unmatched reliability, yield improvement and conversion efficiency.

- *Innova® Turbo* – the fastest, high-yielding advanced yeast in the industry designed for ethanol fermentation times of <52 hours. The solution is unmatched for breaking fermentation bottlenecks, to generate more revenue by increasing plant conversion rates and efficiency.

## Key trends

- Increasing global demand for renewable fuels and technologies that reduce CO<sub>2</sub> emissions is opening the door for alternatives, such as renewable diesel, biodiesel, and second-generation biofuels derived from agricultural waste.
- Growing demand for low-carbon fuels in emerging markets.
- Producers are increasingly diversifying into value streams beyond ethanol, such as feed protein, corn oil or biogas, which creates a pull for biosolutions in fiber conversion.



## SDG impact

Our biosolutions in Bioenergy promote the development and deployment of low-carbon fuels for the transport sector. They enable better use of raw materials, while saving energy when producing bioethanol, corn oil, feed protein and biodiesel.



Learn more about our work with the Sustainable Development Goals on our website.

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## Plugging into the power of plants



The world relies heavily on fossil-based resources in transportation, energy and manufacturing.

Biorefineries enabled by biosolutions are saving millions of tonnes of CO<sub>2</sub> by turning waste and plants into a range of end-products, including biofuels and protein for animal feed. By plugging into the power of plants, we can help bridge the gap to a greener tomorrow.

*“Biofuels are essential for meeting our net-zero ambitions, and they are currently one of the most cost-effective solutions for reducing carbon emissions. In the future, biofuels from biorefineries will also help decarbonize heavy-duty transport, including marine and aviation.”*

– *Hans Ole Klingenberg, Vice President, Marketing Industrial Biosolutions, Novozymes.*

Find sources and insights on the impact of biosolutions in biorefineries on our website.

Visit

# Grain & Tech Processing

## 2022 performance

In 2022, Grain & Tech Processing sales grew 10% organically and 17% in reported DKK. The strong development was driven by double-digit growth in Grain with a strong performance in both developed and emerging markets, supported by innovation and favorable market conditions. Tech was roughly flat as the decline in textile from stronger sales of enzymes used for COVID-19 testing kits.

## Product launches

- *Fiberlife*<sup>®</sup> – biopolishing solution that promote sustainable fashion by enabling textile manufacturers to produce higher quality and longer-lasting fabrics from viscose, modal and lyocell.
- *Frontia*<sup>®</sup> Prime – enables corn starch and sweetener manufacturers to further increase yields, save energy and cut CO<sub>2</sub> emissions.

## Key trends

- Grain producers focus on process optimization and yield enhancement to support the solid demand for processed grains with a reduced environmental footprint.
- The textile industry is responding to changing consumer demand for fabrics with a reduced environmental footprint, with renewed interest in biological alternatives to chemicals, and more focus on localized production.

## SDG impact

Our biosolutions in Grain & Tech Processing optimize processes across a variety of industries while reducing the environmental footprint. They help improve yields and save energy as well as reducing the use of chemicals, water usage, steam and electricity.



Learn more about our work with the Sustainable Development Goals on our website.

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## Getting more from less



In a time of dwindling natural resources and steep commodity prices, it is more important than ever to get the most out of our raw materials. Our biosolutions help make production processes greener while improving yields.

Today, a third of the corn in the world used for producing starch is processed with our *Frontia*<sup>®</sup> solutions. They help cut corn spend by up to 2% with the same starch yield, save up to 20% on energy costs, and reduce CO<sub>2</sub> emissions.

*“It’s more important than ever to get the most out of raw materials while taking better care of our environment. Biotech is essential in rethinking the way we produce now and in the future.”*

– *Alessandro Palumbo, Sr. Global Marketing Manager, Novozymes.*

Find sources and insights on how biosolutions can transform grain and starch processing on our website.

Visit [↗](#)



# Agriculture, Animal Health & Nutrition

## 2022 performance

Sales in Agriculture, Animal Health & Nutrition grew 8% organically and 16% in reported DKK in 2022. Innovation and favorable market conditions, partly linked to higher soft commodity prices, increased demand for yield-enhancing solutions across subareas. The overall performance was solid and driven by strong growth in Animal Health & Nutrition, especially in developed markets, while Agriculture delivered a softer performance.

## Product launches

- *Torque® IF* and *Rachet®* – LCO promoters that improve yields by stimulating the natural growth process above and below the soil surface for corn and other crops.
- *HiPhorius™* – a fourth generation phytase from the DSM-Novozymes Feed Alliance that releases phosphorus from animal feed and enables farmers to reduce phosphorus use.

- *Prefur Odorelief* – a solution that enables biological cat litter control with an easy spray application.
- *P201/P208* – first generation biological fertilizer solutions launched with Anuvia Plant Nutrients that enable farmers to replace a portion of the phosphorus in synthetic fertilizers, thereby reducing the impact on the environment.

## Key trends

- Farmers increasingly need to enhance crop performance and support healthier animals through more efficient production.
- Tightened regulations for the use of pesticides, insecticides and antibiotics, as well as an increased focus on chemical replacement and organic farming.
- Population growth and increased demand for protein are pushing the need for a more efficient, profitable and responsible animal production.



## SDG impact

Our biosolutions improve yields in agriculture by improving plants' access to nutrients in the soil and improve animals' access to energy, proteins and minerals in the feed. The result is better use of arable land for food and feed production, reduced use of chemicals, and reduced emissions to the environment from manure in livestock production.



Learn more about our work with the Sustainable Development Goals on our website.

[Visit](#)

## Healthier crops and healthier animals



To feed a growing population, we need to get the best yield out of crops and farm animals while maintaining the health of both. With our biosolutions, farmers can increase crop yields while navigating the impacts of climate change. In livestock production, our biosolutions enable animals to get more nutrients from feed while protecting the environment.

For example, our recent phytase solution from the DSM-Novozymes Alliance, HiPhorius™, releases natural phosphorus from animal feed, which, in turn, lowers phosphorous emissions to the environment.

*“The industry needs to rethink the way protein is produced. Biosolutions can dramatically improve animal health and nutrition, and we are working with our customers to create the future of animal farming.”*

– Robert Vergo, Global Account Director, Novozymes.

Find sources and insights on how biosolutions make a difference for animal health & nutrition on our website.

[Visit](#)

# Economic contribution

In 2022, Novozymes generated economic value of DKK 18,362 million, and we returned 88% of it to society. The remaining 12% was reinvested in Novozymes to develop the company, build competitive strength, and ensure future value generation for distribution among key stakeholders.

In 2022, Novozymes returned 11% of the value generated to our capital providers, mainly through dividend payments totaling DKK 1,525 million. In addition, Novozymes bought back stock worth DKK 500 million in 2022.

At the end of 2022, the Novo Nordisk Foundation held — through Novo Holdings A/S — 25.6% of the shares in Novozymes. See [The Novozymes stock](#) for more information. The Novo Nordisk Foundation's objective is to support scientific, humanitarian and social purposes, and the Foundation contributes to communities in large scale through donations and impact investments, to which we contribute indirectly through our dividend payments.

## A responsible approach to tax

Novozyymes' tax policy supports a responsible and positive tax contribution to society. We continuously work to fulfill our tax obligations wherever

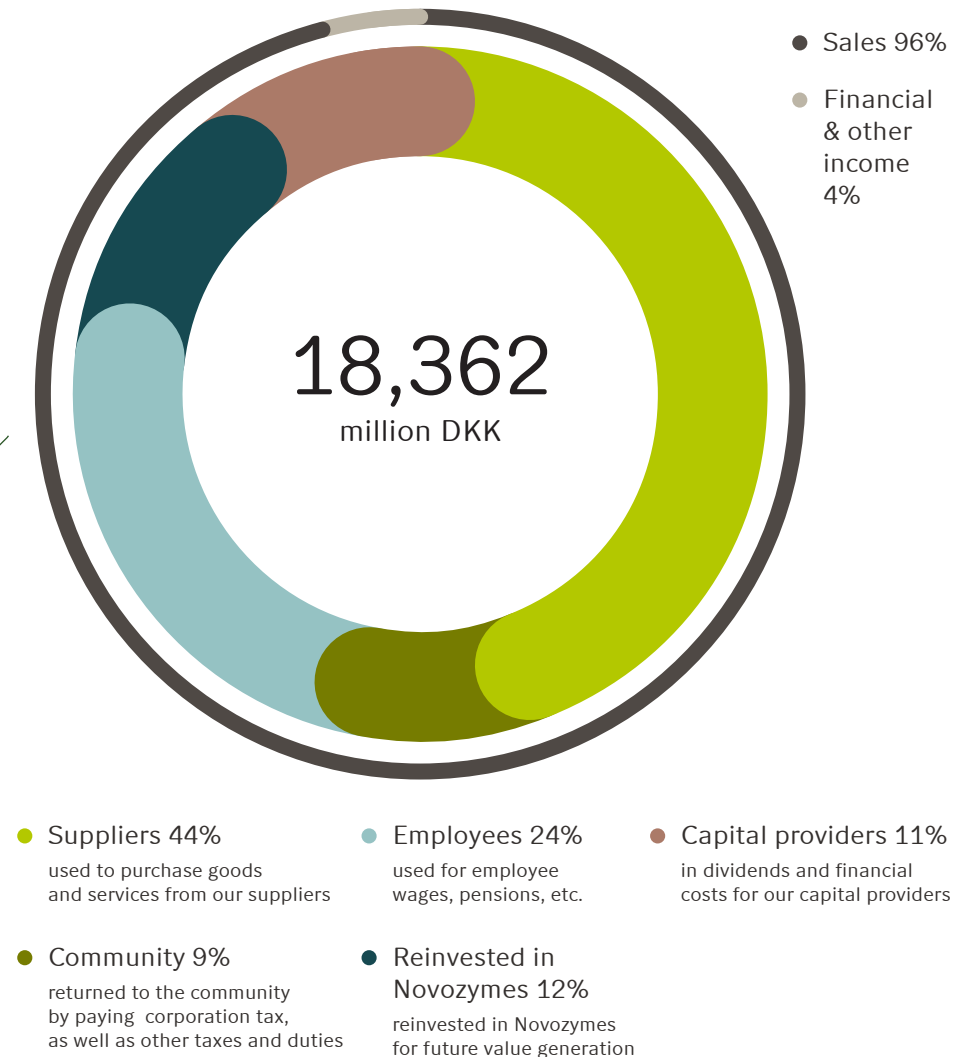
we operate. In 2022, Novozymes incurred corporate income taxes and other taxes and duties of approximately DKK 1,600 million. Tax is a key component of corporate responsibility and governance at Novozymes. We are committed to being open and transparent about our tax policy and tax affairs.

See Novozymes' tax policy and other information about tax on our website.

[Visit](#)

*We returned 88% of the economic value generated to society*

Economic contribution



# Five-year summary

DKK million	2018	2019	2020	2021	2022
<b>Income statement</b>					
Revenue	14,390	14,374	14,012	14,951	17,553
Gross profit	8,255	7,954	7,853	8,623	9,577
EBITDA	5,158	5,292	4,918	5,423	6,046
Operating profit (EBIT) before special items*	4,070	4,039	3,652	4,007	4,629
Operating profit (EBIT)	4,070	4,039	3,652	4,007	4,561
Financial items, net	(117)	(235)	(127)	(79)	2
Net profit	3,227	3,155	2,826	3,145	3,686
<b>Balance sheet</b>					
Total assets	19,697	20,437	20,510	24,767	27,983
Equity	11,438	11,480	11,244	12,206	14,228
Invested capital	13,953	15,507	15,094	18,118	20,703
Net interest-bearing debt	2,535	4,049	3,871	5,225	5,807
<b>Investments and cash flows</b>					
Cash flow from operating activities	3,679	3,196	4,355	4,062	4,006
Purchases of property, plant and equipment	1,332	862	794	1,071	2,760
Net investments excluding acquisitions	1,388	991	936	1,116	2,862
Free cash flow before acquisitions	2,291	2,205	3,419	2,946	1,144
Business acquisitions, divestments, purchase and sale of financial assets	(4)	430	(588)	(1,631)	190
Free cash flow	2,287	2,635	2,831	1,315	1,334

Key ratios have been prepared in accordance with The Danish Finance Society's "Recommendations & Financial Ratios 2015 Nordic Edition" while certain key figures for the Novozymes Group were prepared as described in the Glossary. IFRS 16 was implemented using the modified retrospective approach, and comparative figures for 2018 have not been restated.

DKK million		2018	2019	2020	2021	2022
<b>Key ratios</b>						
Revenue growth, DKK	%	(1)	0	(3)	7	17
Revenue growth, organic	%	4	(1)	0	6	9
R&D costs (% of revenue)	%	13.0	13.7	13.8	13.4	11.4
Gross margin	%	57.4	55.3	56.0	57.7	54.6
EBITDA margin	%	35.8	36.8	35.1	36.3	34.4
EBIT margin before special items*	%	28.3	28.1	26.1	26.8	26.4
EBIT margin	%	28.3	28.1	26.1	26.8	26.0
Effective tax rate	%	18.0	17.0	19.7	19.9	19.1
Equity ratio	%	58.1	56.2	54.8	49.3	50.8
NIBD/EBITDA	x	0.5	0.8	0.8	1.0	1.0
Return on equity	%	28.4	27.5	24.9	27.3	28.6
ROIC** before special items*	%	24.2	21.1	18.9	19.3	17.9
ROIC**	%	24.2	21.1	18.9	19.3	17.6
Earnings per share (EPS), diluted	DKK	11.03	11.01	10.02	11.23	13.19
Dividend per share (2022 proposed)	DKK	5.00	5.25	5.25	5.50	6.00

Environmental, social and governance data		2018	2019	2020	2021	2022
Total number of employees	No.	6,427	6,125	6,185	6,527	6,781
Rate of employee turnover	%	8.8	12.7	8.7	11.8	11.4
Frequency of occupational injuries with absence per million working hours		2.4	0.9	1.3	1.5	1.7
Women in senior management	%	30	31	33	34	33
CO <sub>2</sub> emissions from operations (scope 1+2)***	1,000 tonnes	437	330	234	218	161
CO <sub>2</sub> emissions from supply chain (scope 3)****	1,000 tonnes	715	655	626	684	734
Renewable electricity share	%	37	49	69	68	82
Total water consumption	m <sup>3</sup>	8,205	7,845	7,998	8,538	8,720

\* Special items include costs related to the proposed combination of Novozymes and Chr. Hansen.

\*\* Including goodwill.

\*\*\* 2021 is restated due to full implementation of IEA CO<sub>2</sub> emission factors in U.S.

\*\*\*\* Supply chain emissions coming from purchased goods and services, fuel and energy-related activities, upstream transportation and distribution, waste generated in operations and business travel.



Message from the Chair and the CEO

# Rethinking tomorrow with biotech

In 2022, nations, societies, companies, and people had to navigate a world of intensified challenges. Amid these challenges, we also saw opportunity to build a more resilient future where we are less dependent on fossil energy sources, make better use of the world's resources, and enable people to live better lives.

At Novozymes, we know that biotech holds the key to addressing some of the world's biggest challenges. We are on a journey to enable a healthier planet with sustainable growth, and we invite the world to join us as we Rethink Tomorrow.



### Growing our business

Novozymes stands on a solid foundation. We have delivered strong growth and earnings in a volatile market environment by leveraging the strength of our well-diversified portfolio, unique production capabilities and broad market presence. We are delivering on our strategy “Unlocking growth – powered by biotech”, and we are confident that we will achieve our long-term ambition of doubling our sales by 2030. We expect to unlock additional growth opportunities and accelerate our strategic ambition by the proposed combination of Novozymes and Chr. Hansen to create a leading global biosolutions partner. Together, we will be able to continue the momentum of the two companies and further leverage growth synergies from cross-selling and strong innovation capabilities.

We are very excited about the potential of this combination. By bringing together these two high performing, complementary companies with a shared purpose and advanced capabilities, we can unleash the full potential of biosolutions and generate significant value for our customers, employees, shareholders and society at large.

### 2022 performance

In 2022, our organic sales growth came in at 9%, and our reported EBIT margin was at a solid 26.0%, and 26.4% before special items, which are costs related to the proposed combination with Chr. Hansen. Our free cash flow before acquisitions was DKK 1.1 billion, and we are executing



diligently on our strategy to provide long-term shareholder value.

We delivered double-digit growth across three out of five business areas. Bioenergy saw strong growth across regions and solutions, driven by our innovative and impactful portfolio in a favorable market environment. We delivered a broad-based growth in Food, Beverages & Human Health, led by innovation, consumers focusing on healthy choices, and an environment focused on optimization. Our strong performance in Grain & Tech Processing was driven by innovation and favorable market conditions. Agriculture, Animal Health & Nutrition saw a solid performance, and Household Care was in line with expectations.

### Strategy highlights

Our consistent growth in 2022 shows that our strategy is more relevant than ever. It is rooted in our ability to use the power of biotech to address some of the world’s biggest challenges, while unlocking sustainable growth for our customers, our investors, societies and our company.

During the year, we grew our core business and expanded into areas where we see a strong growth potential. We applied the value of our technologies across multiple application areas, especially in emerging markets where we delivered 9% organic growth. Our biosolutions were in demand as they enabled our customers to improve profitability while reducing their impact on the environment, and to deliver products that meet the growing consumer demand for healthier foods and beverages.

*We are very excited about the potential of the Novozymes-Chr. Hansen combination. By bringing together these two high performing, complementary companies with a shared purpose and advanced capabilities, we can unleash the full potential of biosolutions and generate significant value for our customers, employees, shareholders and society at large.*

We launched 26 biosolutions to meet customer needs, including our Innova® yeasts, which enable bioenergy customers to make their production processes more efficient and to maximize ethanol yields, and our Frontia® solution, which enables corn starch and sweetener manufacturers to increase yields, save energy and cut CO<sub>2</sub> emissions. We supported our household care customers in meeting consumer needs by expanding our freshness platform and launching new biosolutions, including our Carezyme® solutions which extend the lifetime of clothes and help reduce textile waste. Through the DSM-Novozymes Alliance, we launched HiPhorius™ to help poultry producers achieve a more sustainable and profitable protein production.

Using our biotech capabilities, we accelerated growth in BioHealth and Human Nutrition. We realized synergies by cross-selling and combining capabilities between our recent acquisitions and



our core R&D and production capabilities to accelerate product development, scale-up and commercialization. We launched biosolutions that help consumers address digestive and oral health concerns, including BioFresh™ Clean, a unique enzymatic combination that enables consumers to clean and protect teeth, and maintain a healthy oral microbiome.

During the year, we also strengthened our commercial leadership and capabilities to become an even stronger partner for our customers. We invested in new competences and equipment to co-create with our customers in the food and health space, and we have strengthened our investment in consumer and market insights to increasingly align our innovation agenda with unmet consumer needs. Due to overall input cost increases, our commercial organization also engaged with customers on pricing to ensure that we capture a fair share of value from our biosolutions. We saw a visible impact from our pricing discussions and expect this to accelerate into 2023.

Our results in 2022 were made possible thanks to our employees who have shown commitment and adaptability during times of change. The Board of Directors and the Executive Leadership Team are proud of and thankful for our Zymers and their contribution to Novozymes' strategy and purpose.

### Biotech for a healthier planet

We saw a strong pull towards sustainability in 2022. Our customers looked for ways to increase

crop yields while protecting the environment, produce more efficiently, use raw materials better and reduce carbon emissions. They were also keen on improving the performance of their products to meet consumer needs for healthier and more nutritious foods and beverages.

We were able to meet all these needs with our biosolutions. In the transport sector alone, we helped save 65 million tonnes of CO<sub>2</sub> emissions in 2022 by enabling the production of low-carbon fuels – that is the equivalent of taking 27 million cars off the road. Going forward, the number of passenger cars will continue to increase, and while electric cars are gaining more momentum, low-carbon fuels will play an important role in decarbonizing transportation, including in the marine and aviation sectors.

Our biosolutions also play a role in transforming food systems to ensure nutritious foods and beverages for a growing population. For example, we enable the production of tastier plant-based foods at affordable prices, including proteins produced by fermentation, which can reduce carbon emissions by up to 90% compared to animal protein.

The potential is significant, and now is the time to shift from a paradigm that relies on fossil energy sources to a greener and more resilient paradigm. Novozymes is working hard to catalyze this change. Guided by our purpose “Together we find biological answers for better lives in a growing world - Let's rethink tomorrow” we work with our

customers, consumers, governments, academia and many others to enable a healthier planet. We are committed to accelerating a climate-neutral society, transforming food systems and enabling healthier lives, and more than 90% of our revenue in 2022 came from biosolutions that contributed to one or more of these three commitments.

Going forward, we will continue to expand the reach of our biosolutions and maximize the percentage of our sales that enables a better world.

### Making a difference, together

Sustainability is in our DNA, and Novozymes succeeds by combining our financial and nonfinancial performance. In 2022, we concluded our non-financial milestone targets and have set new targets for 2025 for our operations, employees and society.

During the year, we continued to develop our organization, nourish our culture, and ensure a thriving, diverse and inclusive community. We are very proud to have employees who are engaged, believe that Novozymes has a great culture, and who are excited about our company's future. As a result, we achieved a score of 83 on our Zymer Spirit Index, which was +2 above our target and among the 10% highest scoring companies in an external market benchmark.

We also continued to nurture a diverse and inclusive organization and achieved a score of 86 on our Nature Diversity Index, which was in alignment with our target. Our senior management

consisted of 33% women and 67% men, and we are on track to achieve gender balance by 2030. Guided by our new nonfinancial targets, we will continue to promote a workplace where employees can stay safe, thrive, grow, and contribute their worktime to community outreach activities.

As a global leader, we are committed to help building a net-zero future. In 2022, we reduced the CO<sub>2</sub> emissions from our operations by 63%, from a 2018 baseline, and we sourced 82% of our electricity from renewable sources. Additionally, we have taken bold steps to reduce carbon emissions from our entire supply chain with the aim of reaching net-zero by 2050. We are proud to be among the first companies in the world to have our net-zero target across scopes 1, 2 and 3 validated by the Science Based Targets initiative.

Beyond our own walls, we engage with many stakeholders to demonstrate how biosolutions can accelerate a green transition, create sustainable growth and generate low-carbon jobs. In 2022, we participated in the World Economic Forum's Annual Meeting, the U.N. General Assembly and COP27 to advocate for biosolutions as a means of limiting the global temperature increase and supporting a just and equitable transition to a green economy. We will keep up this important work in 2023, including by continuing to collaborate with The B Team, The World Economic Forum, the U.N. Global Compact, International Chamber of Commerce, the U.N. Foundation and many others.



## Looking ahead

The world is everchanging, but Novozymes stands on solid ground. We will carry the great momentum we saw in 2022 forward into 2023, and we have set an organic sales growth expectation of 4-7% in 2023.

During 2023, we will seek shareholder and regulatory approvals for the proposed combination between Novozymes and Chr. Hansen as well as prepare for the post-merger integration. The proposed combination is expected to be completed in Q4, 2023 or Q1, 2024.

Guided by our purpose and strategy, we will continue to allocate resources where they have the biggest impact, and we are already exploring ways to meet future societal needs with biosolutions, such as in carbon capture and plastic degradation. By continuing to expand the reach of our biosolutions, we will unlock growth for our customers, our shareholders and our company while meeting urgent world needs. We are on an exciting journey that has only just begun.

We thank our employees, customers, partners and shareholders for the trust they place in Novozymes and for our continued collaboration to rethink tomorrow, together.



Jørgen Buhl Rasmussen  
Chair



Ester Baiget  
CEO



*“With Novozymes standing on a very solid foundation, and after 12 years as an independent member of the Novozymes Board of Directors including six years as Chair, I have decided not to seek reelection to the Board at the Annual Shareholders’ Meeting on March 2, 2023.”*

This is consistent with Novozymes’ diversity targets for shareholder-elected board members. The timing also coincides well with the announcement of the Novozymes-Chr. Hansen proposed combination and before entering into the detailed post-merger integration planning.

I have had the privilege to be a part of Novozymes’ journey during the past 12 years, and it has been very exciting to see the company grow and become a market leader in biosolutions. This achievement could not have been

possible without the unique spirit and passion of Zymers, which I have always admired.

Novozymes has clearly made its mark on the world, not least when it comes to sustainability leadership and in turning talk into action. It has been a personal ambition of mine to integrate sustainability into the company and its strategic direction, and I am very pleased to note that we have achieved this together.

It has been a great honor to serve on the Board and to engage with dedicated colleagues in guiding Novozymes in the right direction. We live in a world in urgent need of sustainable answers, and Novozymes offers a clear path forward. I have no doubt that the future is brighter with biotech, and I will be following Novozymes closely on its continued journey.

I am passing the torch to a very experienced and dedicated colleague with extensive insights in Novozymes and the biotech industry. I am confident that Cees de Jong is the right person to drive Novozymes’ journey forward and I wish him and all colleagues in Novozymes the best going forward.

*Jørgen Buhl Rasmussen*

Learn more about the proposal of candidates to the Board of Directors in the [Corporate governance section](#).

# Our business

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# Strategy & commitments

We live in a dynamic world with growing populations, increasing nutritional needs and demands, and an urgent climate crisis. In this global context, our strategy “Unlocking growth – powered by biotech” is more relevant than ever. It is rooted in our unique ability to use the power of biotech to address some of the world’s biggest challenges, while unlocking sustainable growth for our customers, investors, societies and our company.

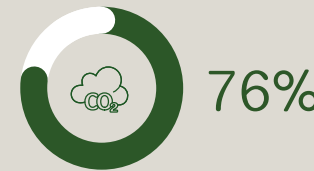
Amid intensified global challenges in 2022, we saw a push for a greener tomorrow and increasing demand for our biosolutions. Sustainability was a key value driver, and our customers kept looking for ways to produce more efficiently, use raw materials better and reduce carbon emissions. Due to a heightened consumer awareness of health and well-being, we also saw an increased demand for improved and new biosolutions to create healthier and more nutritious foods and beverages.

We met these demands by leveraging our strong portfolio and broad exposure across many industries. Fifteen months into our strategy, we are delivering the growth we promised, and we are confident that we will achieve our long-term ambition of doubling our sales by 2030. We expect to unlock additional growth opportunities, strengthen our biotech toolbox, and accelerate our strategic ambition by the [proposed combination](#) of Novozymes and Chr. Hansen to create a leading global biosolutions partner.

## Our commitments to a healthy planet

Guided by our purpose, “Together we find biological answers for better lives in a growing world - Let’s rethink tomorrow”, we work with our customers, consumers, governments, academia, and many others around us to enable a healthier planet. For this reason, our strategy starts with our 2030 commitments: “Accelerate towards a climate-neutral society”, “Transform food systems” and “Enable healthier lives”.

**Our biosolutions are already having a positive impact on the world, and below we disclose revenue share of each of our commitments to a healthy planet:**



**of our revenue came from biosolutions that help accelerate a climate-neutral society.** We enable our customers to reduce CO<sub>2</sub> emissions by helping them produce more from less and reduce the use of fossil-based energy and chemicals. We also bring forward new technologies to reach a climate-neutral society.



**of our revenue came from biosolutions that help transform food systems.** We enable customers to rethink food production from field to fork by growing more per acre and ensuring better quality, nutritious food and beverages. Our biosolutions also help reduce food waste and enable products with plant-based protein.



**of our revenue came from biosolutions that enable healthier lives.** We rethink how to improve people’s quality of life through biosolutions that enhance nutrition and increase well-being. We unlock health benefits through probiotics, and we help customers produce foods and beverages with less sugar, healthier baked goods and products with plant-based protein.

The total adds up to more than 100% as some of our solutions contribute to more than one commitment.

In the spotlight

# Transforming food systems from field to fork

The world has managed to feed more and more people in recent decades, but growing populations, increasing nutritional needs, and the impact from climate change mean that we have to rethink the way we produce and consume.

*“Some of the solutions to tackle these challenges already exist today. Biosolutions can help create resilient food systems in the face of climate change, and they can help meet the nutritional needs of a growing population,”*

– Claus Stig Pedersen, Head of Global Sustainability at Novozymes.

Novozymes' biosolutions play an important role along the entire food value chain. They help farmers produce more crops per acre, improve the nutrition and health of livestock and enable food and ingredient producers to make better use of raw materials. They also help consumers to reduce food waste, get access to nutritious products with added benefits and enjoy tastier plant-based foods and beverages.





**Higher yields from the same crops**

To transform global food systems, it is important to look at the way we grow food for people and animals. In 2022, climate change and severe weather once again impacted crops and agricultural supply chains.

Biosolutions can help make crops more resilient to climate change, increase crop yields, reduce the use of synthetic fertilizers and lower CO<sub>2</sub> emissions. If our biosolutions were applied to all of U.S. cornfields and all of U.S. chicken production, they would save carbon emissions equivalent to taking 18 million U.S. cars off the road. To add context, there are currently 16.5 million electric cars on the roads globally.

**Making better use of raw materials**

In 2022, the world experienced shortages of raw materials, spurred on by the COVID-19 pandemic and geopolitical conflicts. By July on Earth Overshoot Day, we had used all the resources that the planet generates during an entire year. With biosolutions, we can make better use of the raw materials available, for example by gaining more starch and protein from corn and getting more vegetable oil from the same volume of feedstocks.

**Reducing food waste**

It is important to tackle food waste in order save scarce resources, reduce carbon emissions and tackle hunger. One approach to reducing food waste is by extending the shelf-life of baked goods. Our biosolutions help retain the freshness

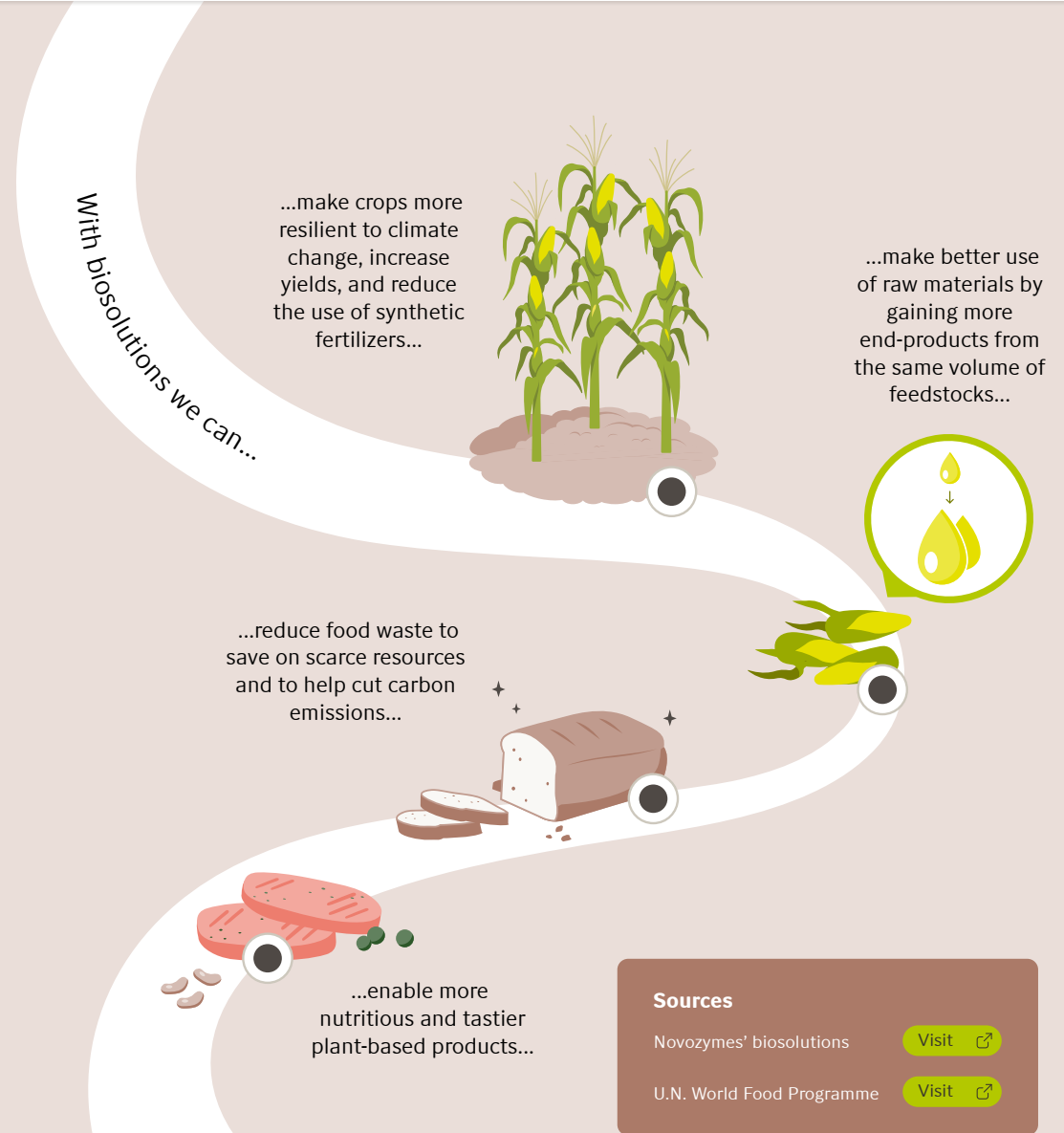
of baked goods such as breads, flatbreads, tortilla wraps, and cakes for longer periods of time. For example, our fresh-keeping solutions for bread have saved approximately 80 billion loaves of bread from being thrown away. If stacked up, those loaves would reach to the moon and back ten times.

**Plant-based products**

To feed a growing population, the world also needs to look at different sources of protein. In fact, if 10% of protein demand was replaced with alternative proteins, it would bring enough grain savings to free up 50% of arable land in Europe.

Consumers are increasingly turning to plant-based foods, but the taste, mouthfeel and price must be right to make these products go mainstream. Our biosolutions help improve the taste and texture of plant-based foods and beverages, for example by giving plant-based drinks the smooth feel that consumers want.

Proteins produced by fermentation can also enhance the taste, texture, and nutritional profile of plant-based meats, and they have the potential to reduce carbon emissions by up to 90% compared to animal protein. Novozymes is investing heavily in an advanced protein production facility to meet the growing demand for plant-based protein.





## 2022 strategy highlights

“Unlocking growth – powered by biotech” has guided our efforts, priorities and investments, and we have allocated capital and resources to where they matter the most.

During 2022, we grew our core business and expanded into areas where we see a strong growth potential, and we launched 26 biosolutions of which 13 were public. Our unique production competencies and ability to scale make us stand out. We continued to invest in new equip-

ment and efficiency improvements to free up capacity and ensure that we have the necessary capabilities to meet the growing demand for our biosolutions.

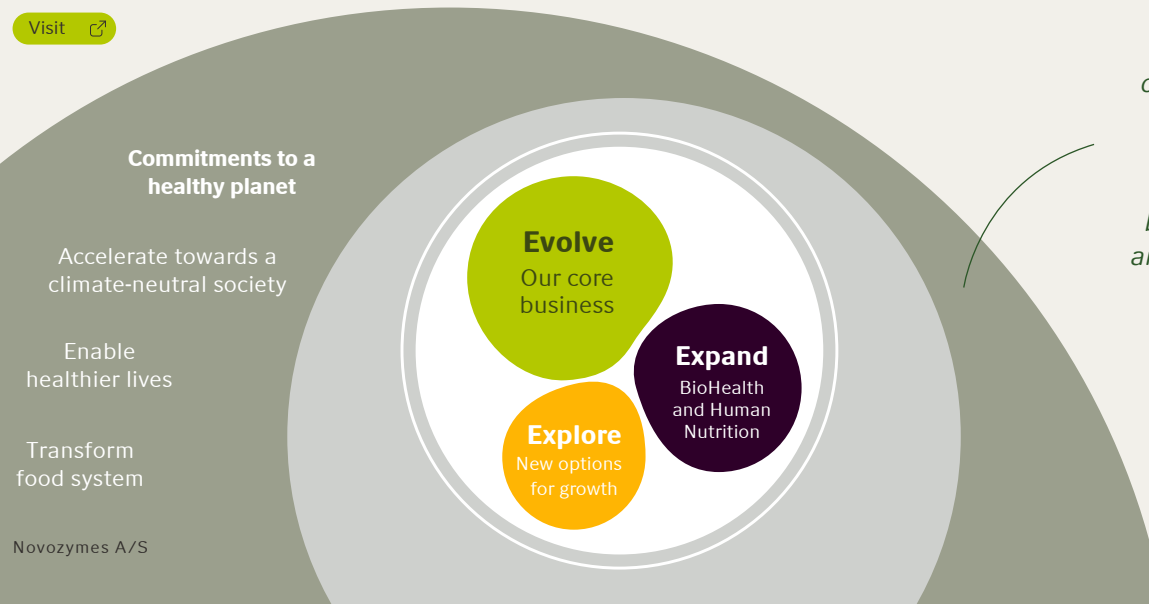
In addition, we strengthened our commercial leadership and our capabilities to become an even stronger partner to our customers. We invested in new competences and equipment to co-create with our customers in the food and health space, and we have strengthened our investment in consumer

and market insights to increasingly align our innovation agenda with unmet consumer needs.

Due to overall input cost increases, our commercial organization also engaged with customers on pricing to ensure that we capture a fair share of value from our biosolutions. We saw a visible impact from our pricing discussions and expect this to accelerate into 2023.

Read more about our business model on our website.

Visit 



### Commitments to a healthy planet

Accelerate towards a climate-neutral society

Enable healthier lives

Transform food system

**Evolve**  
Our core business

**Expand**  
BioHealth and Human Nutrition

**Explore**  
New options for growth

*“Unlocking growth – powered by biotech” starts with our three commitments to a healthy planet. They shape our three growth pillars, which guide our investments and priorities to grow Novozymes: Evolve our core business, Expand into the high-growth areas of BioHealth and Human Nutrition and Explore new options for growth.*

Further explore our strategy on our website.

Visit 


### **Novozymes and Chr. Hansen to combine and create a leading global biosolutions partner**

Novozymes and Chr. Hansen announced on Dec. 12, 2022, the proposed combination of the two companies to create a leading global biosolutions partner with a broad biological toolbox and a diversified portfolio across markets. This is an important next step on our strategy “Unlocking growth – powered by biotech”.

By bringing together these two high performing, complementary companies with a shared purpose and advanced capabilities, we can unleash the full potential of biosolutions and generate significant value for all stakeholders and society at large. Together, we will meet customers’ growing demands for efficient, scalable and sustainable biosolutions. We will also be equipped to stand stronger in addressing global challenges, including enabling healthier lives, transforming food systems and accelerating towards a climate neutral society.

The combined group will have a global talent pool of diverse and passionate employees who will benefit from a strong purpose-driven culture, expanded global presence, and a shared ambition to provide answers to the biggest challenges facing society.

Click to learn more about the proposed combination.

Visit 



## Evolve

Our core business

We launched several biosolutions across our core business areas in 2022, applying the value of our technologies across multiple applications in regional markets, and we offered our customers innovative digital tools to optimize their products and production processes.

We expanded our global reach through an increased local presence. We delivered 9% organic growth in emerging markets through biosolutions that helped meet regional needs. In addition, we invested to build capabilities across our regional sites to secure long-term growth. For example, we improved our Innovation Technology Center in Turkey by adding a new pasta line, which will help expand our offerings to customers in the region. We also opened the world's first enzymatic degumming center in Brazil to help customers in the oil processing industry gain better yields.

Our biosolutions in bioenergy were in demand during 2022, driven by favorable market conditions and increasing customer interest in innovation. We helped customers achieve higher yields and to diversify their value streams to capture more protein, corn oil and fiber. We launched two new yeast solutions that maximize yields and help ethanol customers achieve a robust and efficient production. We also supported biodiesel customers in converting waste oils and fats into biodiesel with a lower carbon footprint. Our biosolutions for second-generation ethanol production also gained traction during the year.

We continued the global roll-out of our freshness solutions to household care customers across different segments, such as liquid, powder and capsule detergents, to meet consumer demand for deep hygienic cleaning. In addition, we launched new solutions that enable fabric and color care in detergents and softeners, which help reduce textile waste.

To help meet the global demand for animal protein, while also protecting the environment, we launched innovative solutions together with our alliance partner DSM. Our latest phytase technology enables animals to get more nutrients from feed by releasing natural phosphorus, which, in turn, lowers phosphorous emissions to the environment.

The greater demand for protein is also a key trend within the food industry. We enabled customers in

baking to produce protein and fiber-rich breads with pulses, such as chickpeas, while maintaining the expected texture and appearance. We also supported baking customers in advancing towards clean label products, limiting or avoiding ingredients such as emulsifiers, gluten or ascorbic acids, which helped drive growth in this segment.

Our newest Frontia® solution was brought to market to enable corn starch and sweetener manufacturers increase yields, save energy and cut CO<sub>2</sub> emissions. We also supported our customers in agriculture in improving their crop yields by launching two new biosolutions that enhance the uptake of nutrients in corn and other key crops.





## Expand

BioHealth  
and Human  
Nutrition

In 2022, we continued to strengthen our biotech capabilities to drive growth in BioHealth and Human Nutrition.

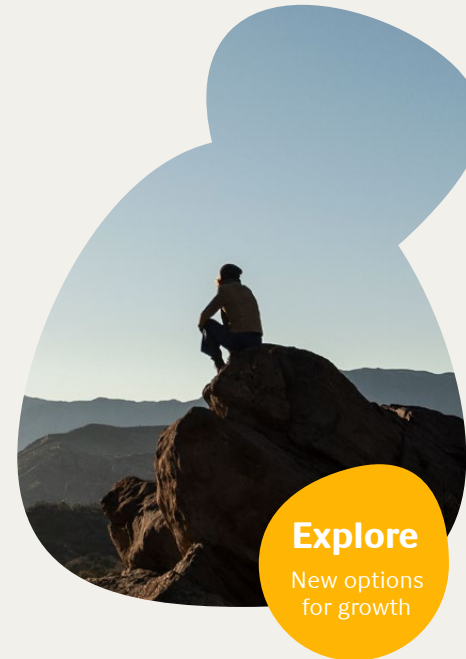
We focused on the integration of our recent acquisitions and realized synergies by cross-selling and combining capabilities from our acquired businesses. By applying the R&D capabilities of our acquisitions and core Novozymes, we accelerated product development, scale-up and commercialization to drive growth.

We expanded the reach of several of our biosolutions for digestive, oral and cognitive health to meet a growing consumer demand for supplements that enhance health and well-being.

For example, we launched BioFresh™ Clean, a unique enzymatic combination that enables consumers to clean and protect their teeth, and maintain a healthy oral microbiome. We also started cross-selling biosolutions from dietary supplements to the functional food space in China, to enable health benefits in products such as yoghurts.

In addition, we began to change and strengthen our engagement with customers in a co-creation process in the food and health space, bringing novel market and consumer insights to guide the development of better solutions to meet consumer needs. And we progressed in line with our plans to bring our protein production facility at our site in Nebraska, U.S., online by the end of 2023. We have invested 2 billion DKK in the facility to meet the growing demand for plant-based protein.

We are excited about the potential to further accelerate our strategic ambitions within the BioHealth and Human Nutrition space through the proposed combination with Chr. Hansen.



## Explore

New options  
for growth

In 2022, we continued to explore new areas for growth to unleash our long-term growth potential. Applying a venture mindset, we worked on maturing a number of these long-term growth areas, such as fertilizer replacement and solutions for biocontrol, carbon capture and biological plastic recycling.

We are working to develop biological fertilizer alternatives in agriculture, including solutions for both nitrogen and phosphate. Our first phosphate replacement product was launched in 2022 together with Anuvia Plant Nutrients, and we are working on several solutions for the coming years. We are also working with partners to develop biosolutions that can protect crops, such as corn and soy, against fungal diseases. In addition, we are exploring the development of biosolutions to combat post-harvest waste.

During the year, we matured our collaboration with Saipem in enzymatic carbon capture, which is a cleaner and more cost-effective method of carbon capture compared to traditional processes. Saipem's demo plant in Canada has proven the capabilities of the technology and potential of enzyme-based carbon capture.

We also advanced our collaboration with Carbios on biological recycling of PET plastic to address the challenge of plastic pollution. We have delivered commercial enzymes to Carbios' demonstration unit, which met performance expectations. Going forward, we will continue our partnership to further develop, optimize, and produce enzymes for the world's first biological PET-recycling plant that Carbios intends to build in France. The plant is to be operational in 2025 and will be able to process 50,000 tonnes of waste per year.

In the spotlight

# Co-creating with our customers from idea to product

Consumers want to manage their health and well-being and are increasingly looking for food, beverages, and supplements with added benefits at affordable prices.

*“We have invested in new capabilities during 2022 and are engaging differently with our customers in the food and health space to meet consumer demands. We are co-creating from idea to product by combining consumer insights and customer needs with our unique technologies and production capabilities. Customer co-creation centers will further accelerate this journey and allow us to immerse ourselves into our customers’ worlds – and invite them to enter the world of biotech,”*

– Lotte Clemmen Christensen, Vice President of Corporate Strategy & New Business Development at Novozymes.

We are excited about the proposed combination of Novozymes and Chr. Hansen and the opportunity to enable an even stronger collaboration with our customers. With several application centers globally, and a strong track record of application and customer-focused innovation, the proposed combination with Chr. Hansen is expected to increase the reach of our physical presence and strengthen the co-creation mindset. Our combined global reach, diversified portfolio, innovation capabilities, and ability to scale production of bio-solutions will enable us to meet customer and consumer demands even better and faster.

## A full circle approach

We started the customer co-creation journey in 2022 by investing in our in-house capabilities. We have welcomed food and beverages scientists, nutritionists, regulatory advisors and prototyping

experts to Novozymes. In addition, we have invested in new equipment to formulate product prototypes.

Whether it is about helping customers launch oat-based beverages or protein-rich breads, our bio-solutions must help meet real consumer needs, especially when it comes to the taste, texture and benefits of foods, beverages and supplements.

We have held several co-creation sessions with our customers to accelerate their innovation

processes and bring products to market faster. Based on consumer insights, we have developed prototypes to give customers a tasting experience and to validate products early in the process. At the same time, we helped our customers develop relevant market claims to position their products towards consumers.





# Targets & outlook

To live our purpose, deliver on our strategy, and achieve our long-term commitments to a healthy planet, we have financial and nonfinancial targets for our business, operations, employees and society. They guide our efforts to improve the environmental performance of our operations, ensure that we continue to better our workplace, and that we act as a responsible corporate citizen. We hold ourselves accountable by transparently evaluating and reporting on our targets.

In 2022, we concluded our nonfinancial milestone targets for 2022, and we achieved 11 out of our 12 quantitative targets\*. To guide our journey towards achieving our long-term commitments, we have set new nonfinancial milestone targets for 2025 on Operations and on Employees & society. There are no changes to our current financial targets, which reflect our strategy and run until 2025.

## 2022 nonfinancial milestone targets

We concluded our nonfinancial milestone targets for 2022 and are proud to have improved the environmental impact of our operations, engaged and developed our employees, and continued to enable our customers to reduce their CO<sub>2</sub> emissions.

## Operations

We significantly improved our footprint on the environment and have reduced CO<sub>2</sub> emissions from our operations by 63% from a 2018 baseline. This was driven by continued focus on energy efficiency and increased sourcing of renewable electricity. In 2022, 82% of our electricity came from renewable sources. In addition, across all our sites\*\*, we established programs to manage water in balance with local conditions, zero waste plans, and we achieved 100% circularity of our biomass waste.

## Zymers & society

We achieved our targets on engagement, learning, diversity and safety. We are very proud to have

employees who are engaged, believe that Novozymes has a great culture, and who are excited about our company's future. As a result, we achieved a score of 83 on our Zymer Spirit Index, which was +2 above our target. The Index is comprised of questions from our annual employee survey, and our score is among the 10% highest scoring companies in an external market benchmark.

In addition, we achieved our target on learning with a score of 80, which is also among the 10% highest scoring companies. Our score reflects our continuous efforts to ensure that employees have good opportunities to learn and grow at Novozymes.

We continued to nurture a diverse and inclusive organization where employees thrive, feel valued and have a sense of belonging. We achieved a score of 86 on our Nurture Diversity Index, which measures the ratio of women and international employees at both senior management and management level. Our score was in alignment with our target, reflecting our continuous efforts to foster diversity, inclusion and equity in all aspects of employment. In 2022, we had 33% women and 67% men in senior management, and we are on track to achieve gender balance by 2030. We also continued our community outreach activities and contributed to society around us during 2022.

The safety and well-being of our employees is key to Novozymes, and we achieved our safety target to have a three-year rolling average of occupa-

tional injuries with absence\*\*\* ≤ 1.5 by 2022. During the year, we conducted several initiatives to support safety awareness, such as our global mandatory safety e-learning for all employees and multiple site and regional safety dialogues.

\* We also continued to pledge 1% of our work time to local outreach activities as part of our "Inspire the world" commitment, which has qualitative reporting only.

\*\* The targets do not include sites with activities not considered to have a significant environmental impact, e.g. sales offices, R&D labs, etc.

\*\*\* Lost-time injuries per million working hours.





Operations

**Climate**

We are committed to high standards and ambitious actions to improve our climate footprint across scopes 1, 2 and 3 with the aim of reaching net-zero by 2050. Our net-zero target has been validated by the Science Based Targets initiative\*.



	2022 target	Status	2025 target	2030 validated target	2050 validated target
<b>Scope 1+2</b>	Reduce absolute CO <sub>2</sub> emissions** from our operations by 40%	Achieved	Reduce absolute CO <sub>2</sub> emissions** from our operations by 65%  Purchase 100% renewable electricity (previously set as a 2030 target)	Reduce absolute CO <sub>2</sub> emissions** from operations by 75%	Net-zero*
<b>Scope 3</b>	n/a	On track towards achieving our 2030 target		Reduce absolute CO <sub>2</sub> emissions** from supply chain*** by 35%	

\* Novozymes commits to reach net-zero GHG emissions across the value chain by 2050 from a 2018 base year. Near-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 75% by 2030 from a 2018 base year<sup>1</sup>. Novozymes also commits to increase annual sourcing of renewable electricity from 37% in 2018 to 100% by 2025. Novozymes further commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 35% by 2030 from a 2018 base year. Long-Term Targets: Novozymes commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2050 from a 2018 base year<sup>1</sup>. Novozymes also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and business travel 90% within the same timeframe. <sup>1</sup>The targets boundary includes biogenic emissions and removals associated with the use of bioenergy.

\*\* From a 2018 baseline.

\*\*\* Supply chain emissions coming from purchased goods and services, fuel and energy-related activities, upstream transportation and distribution, waste generated in operations and business travel.

## 2022 summary

We achieved a 63% reduction of our absolute CO<sub>2</sub> emissions\*\* driven by continued focus on energy efficiency and increased sourcing of renewable electricity. In 2022, 82% of our electricity came from renewable sources.

One of the key contributors to the emissions reduction for the full year of 2022 was our site in Hongda, China, for which we procured green electricity via International Renewable Energy Certificates (I-RECs).

Learn more in the Notes on [Climate change](#) and [Energy](#).

## Our journey towards a net-zero future

Climate action is an integral part of Novozymes' business strategy and an area where we have been leading the way for many years. We have made significant achievements in increasing the sourcing of renewable energy and reducing energy use in our operations by implementing optimization or energy-saving projects. For more details, see the Notes on [Climate change](#) and [Energy](#).

Driven by these actions, we have since 2018 reduced the CO<sub>2</sub> emissions from our operations by 63% from a 2018 baseline. In 2022, 82% of our electricity came from renewable sources.

We embrace our responsibility to help societies accelerate towards a net-zero future. Therefore, with our new nonfinancial milestone targets, we take a bolder step towards achieving net-zero by decarbonizing our own operations as well as our supply chain. As one of the first companies in the world, our net-zero target was validated by the Science Based Targets initiative, and our [net-zero roadmap](#) on the following page outlines our decarbonization journey towards 2050.

We transparently disclose our own emissions and take action to reduce our climate impact. In 2022, Novozymes' total estimated CO<sub>2</sub> emissions across scopes 1, 2 and 3 were 0.9 million tonnes, the majority of which were from scope 3.

In addition to our own carbon reduction efforts, we embrace our sustainability leadership and actively drive climate action on the global stage. We engage with many stakeholders to demonstrate the potential of biosolutions, and how they can accelerate a green transition, create sustainable growth, and enable millions of low-carbon jobs. In 2022, we contributed to and participated in the World Economic Forum's Annual Meeting, the U.N. General Assembly and COP27 to advocate for biosolutions as one way to limit the global temperature increase, and to support plans that ensure a just and equitable transition to a net-zero economy.

We will continue this important work in 2023, including our collaboration with organizations such as The B Team, The World Economic Forum, the U.N. Global Compact, International Chamber of Commerce, the U.N. Foundation and many others to push for a greener future.

### Recognized for our sustainability efforts

Novozymes is proud to be recognized for our sustainability leadership and performance by many leading rating agencies, including CDP, MSCI, Sustainalytics, Ecovadis and more.

In 2022, Novozymes is one of a small number of companies that was named on CDP's Climate Change A List for our commitment to environmental transparency and action on climate change. We also received A- for our water security disclosures, which recognizes our good water management practices.

Learn more about the ratings on our website [Visit](#)

CO <sub>2</sub> equivalent emissions (1,000 tonnes)	2018	2019	2020	2021	2022
<b>Scope 1 total</b>	<b>38</b>	<b>40</b>	<b>37</b>	<b>43</b>	<b>46</b>
<b>Scope 2 total</b>	<b>399</b>	<b>290</b>	<b>197</b>	<b>175*</b>	<b>115</b>
Purchased Goods and services	536	496	492	510	545
Fuel and energy related activities	95	83	65	108	109
Upstream transportation and distribution	63	60	59	59	67
Waste generated in operations	7	7	8	6	7
Business travel	14	9	2	1	6
<b>Scope 3 total</b>	<b>715</b>	<b>655</b>	<b>626</b>	<b>684</b>	<b>734</b>
<b>Total scopes 1+2+3 emissions</b>	<b>1152</b>	<b>985</b>	<b>860</b>	<b>902</b>	<b>895</b>

Scope 1: Direct GHG emissions that occur from sources controlled or owned by an organization.

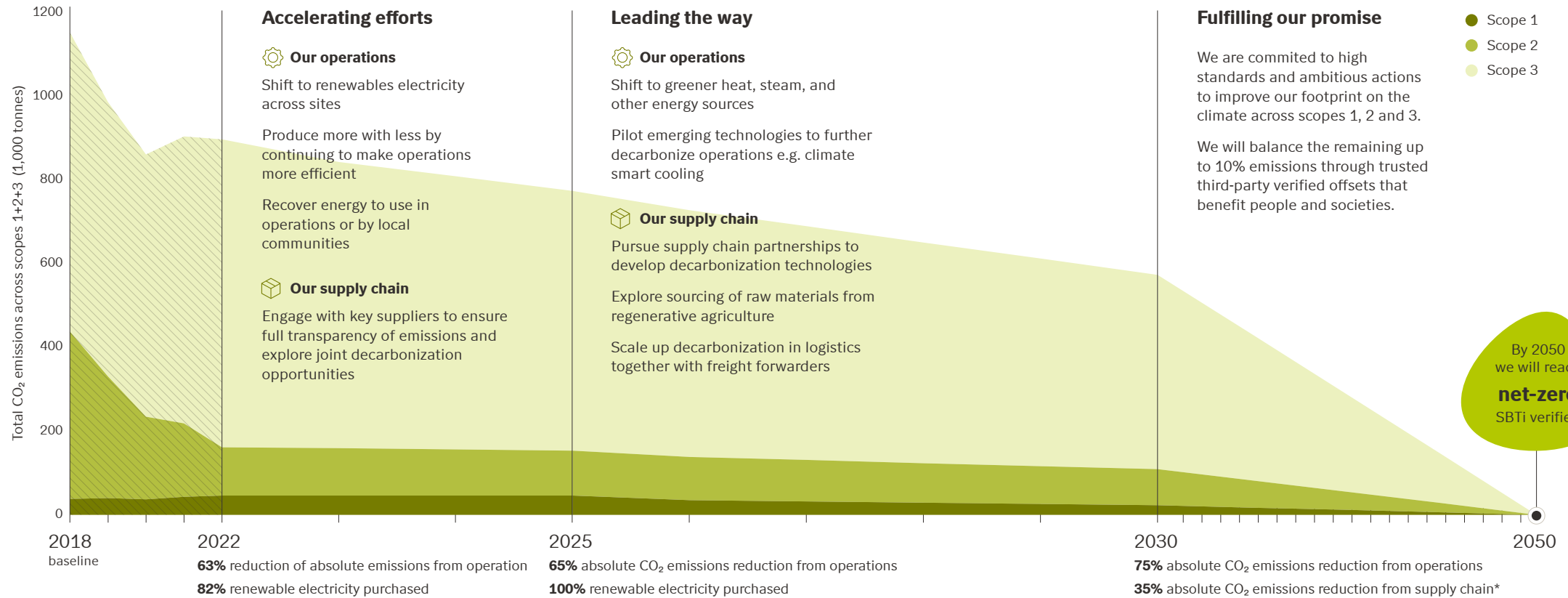
Scope 2: Indirect GHG emissions associated with purchased energy.

Scope 3: All other GHG emissions resulting from activities not owned or controlled by Novozymes, but which form part of our value chain

\* 2021 is restated due to full implementation of International Energy Agency CO<sub>2</sub> emission factors in the U.S.

## Our net-zero journey

Drive market transformation and advocate for climate action



\* Supply chain emissions coming from purchased goods and services, fuel and energy-related activities, upstream transportation and distribution, waste generated in operations and business travel.

Operations

**Water**

Our approach towards water stewardship is driven by science and our ambition to manage water in balance with local conditions at all our sites. We focus both on optimizing our water consumption, and, outside our operations, we work on water restoration in collaboration with external partners, including the World Wide Fund for Nature (WWF).



## 2022 summary

All our sites\* had programs with actions to help us address local water challenges, and they are now under implementation.

We strengthened our efforts at the community level in India to address Water, Sanitation and Hygiene (WASH) challenges, such as having access to drinking water.

In Denmark, we announced a collaboration with Novo Nordisk and Kalundborg Forsyning to invest in a new district cooling system that will use cold salt water from the ocean instead of freshwater from the local lake.

	2022 target	Status	2025 target	2030 long-term commitment	2035 long-term commitment
<b>Context-based water management</b>	Develop context-based water management programs at 100% of our sites*	Achieved	Restore 10 billion liters of water** in basins close to our production sites where WASH is a challenge	Restore 30 billion liters of water** in basins close to our production sites where WASH is a challenge	
<b>Water recycle</b>	n/a		Improve freshwater withdrawal by recycling 10% more water**	Improve freshwater withdrawal by recycling 15% more water**	Improve freshwater withdrawal by recycling 20% more water**

\* The targets do not include sites with activities not considered to have a significant environmental impact, e.g. sales offices, R&D labs, etc.  
 \*\* From a 2021 baseline.

Learn more in the Note on [Water](#).

Operations

**Circular**

Novozymes is committed to managing waste and resources in a circular manner. In our operations, we take a holistic approach towards circularity, such as via packaging recyclability as well as site-specific initiatives to reduce and recover waste.



	2022 target	Status	2025 target	2030 long-term commitment
<b>Zero waste</b>	Achieve 100% circular management of our biomass	Achieved	Two key circular projects in pilots with demonstrated benefit	Zero waste to landfill from operations*  Three key circular projects successfully implemented
	Develop programs to reach zero waste by 2030 at 100% of our sites*	Achieved		
<b>Circular packaging</b>	Develop plans for circular management of 100% of key packaging materials	Achieved		

\* The target does not include sites with activities not considered to have a significant environmental impact, e.g. sales offices, R&D labs, etc.

## 2022 summary

100% of our biomass was managed in a circular manner and used as raw material in fertilizer production for agriculture with or without prior biogas production. We closed the gap by finding new partners to benefit from this waste stream.

All our sites\* had zero waste programs in place. Many actions from these sites have already been implemented, and in 2022, we achieved 63% recycling rate of the non-bio-mass waste.

We completed the development of nine plans to make our key packaging recyclable, reusable or compostable. Actions from these plans have been prioritized and implementation has started.

We have stronger processes to evaluate and introduce new enzyme packaging based on recyclability and reusability criteria. We are also actively working towards introducing packaging made with less virgin plastic.

Learn more in the Note on [Waste](#).



Zymers & society

**Include**

We strive for an inclusive and diverse organization. We aim to achieve that by nurturing a culture of inclusion and belonging, where employees can be themselves, and by fostering equity in all aspects of employment. We seek to achieve gender balance\* and mirror the societies in which we operate. By bringing together diverse and complementary skills, we will have a strong foundation for delivering on our promises.



	2022 target	Status	2025 target	2030 long-term commitment
<b>Diversity &amp; inclusion</b>	Achieve a score of 86 in our Nurture Diversity Index.	Achieved	≥ 35% women in senior management and ≥ 45% women across all professionals	≥ 45% women and ≥ 45% men across all professionals and in senior management

\* Gender balance means that, as a minimum, we will have 45% women and 45% men across all professionals and in senior management. Definitions on professional and senior management can be found in the Note on [Inclusion & diversity](#).

## 2022 summary

We scored 86 in our Nurture Diversity Index, which measures the ratio of women and international employees at both senior management and management level. Our senior management consisted of 33% women and 67% men.

We conducted different regional initiatives to promote a diverse and inclusive workforce, covering hiring, parental leave, parent care leave and diversity trainings.

Learn more in the Note on [Inclusion & diversity](#).

Zymers & society

**Thrive**

We take pride in having a workplace where employees can stay safe, thrive and grow. We achieve that by ensuring their safety, promoting mental and physical well-being, supporting them across different life stages as a compassionate employer, and boosting their learning and skills development.



	○ 2022 target	○ Status	○ 2025 target	📍 2030 long-term commitment
<b>Safety &amp; well-being</b>	Three-year rolling average of occupational injuries with absence* ≤ 1.5 by 2022	Achieved	Three-year rolling average of occupational injuries with absence* ≤ 1.5 by 2025	A workplace where employees stay safe, thrive and grow
<b>Excite employees</b>	Achieve a score of at least 81 on our Zymer Spirit Index	Achieved	Achieve the same score as benchmark on our Thrive Index**	
<b>Enable learning</b>	Achieve a score of at least 80 on learning in our annual employee survey	Achieved		

\* Lost-time injuries per million working hours.

\*\* Our Thrive index merges the Zymer Spirit Index and learning scores and is developed from specific questions around engagement and development from our annual employee survey.

## 2022 summary

Our three-year rolling average of occupational injuries with absence\* was recorded at 1.5, which was in alignment with our target.

In 2022, we conducted several initiatives to support safety awareness, such as our global mandatory safety e-learning for all employees and multiple site and regional safety dialogues. We also improved equipment, processes, and ways of working to reduce ergonomic risks. We will continue our safety efforts to drive a safety culture, ensure that safety behaviors are part of our organization and to proactively prevent injuries.

We achieved a score of 83 on our Zymer Spirit Index, showing our employees to be engaged and committed to our purpose and strategy. During the year, we focused on implementing our strategy and ensuring a clear direction for the future. We also conducted initiatives to nurture our culture, e.g. a global campaign where employees engaged with our purpose.

We achieved a score of 80 on learning in our annual employee survey. We introduced a new leadership development tool, aiming to continue to develop our managers and ensure that Novozymes remains a great place to work where results are created. We also launched our global graduate program to develop future Novozymes talent with strong change and strategy execution capabilities.

Learn more in the Note on [Employee safety & well-being](#).

Zymers & society

**Inspire**

We pride ourselves on having a culture of change-makers with employees who want to leave a positive mark on the world. We encourage this by pledging 1% of our work time to community outreach activities that support community needs, help educate the next generation and enable our employees to live more sustainably.



## 2022 summary

Our employees engaged in multiple initiatives and causes, including making donations to Ukrainian refugees (funds and essential goods), global Joy of Giving holiday campaign to make a difference for local communities, and teaching children about science in local schools.

We also inspired more sustainable living practices among our employees. For example, in India, we established infrastructure for bikes at our campuses to encourage more employees to ride a bike to work.

	2022 target	Status	2030 long-term commitment
<b>Inspire the world</b>	Pledge 1% of our time to local outreach activities	Qualitative reporting only	Pledge 1% of our time to community outreach

Learn more in the Note on [Community engagement](#).

World

Our World targets were set in 2019 towards 2022. They have guided our efforts to strengthen the positive impact of our biosolutions on the world by helping our customers reduce CO<sub>2</sub> emissions, enabling better production processes, and working to ensure clean water by replacing chemicals in laundry detergents.

Going forward, we will continue to expand the reach of our biosolutions to have a positive impact on the world. This is anchored in our strategy, which starts with our 2030 long-term commitments to a healthy planet: “Accelerate towards a

climate-neutral society”, “Transform food systems” and “Enable healthier lives”. We will also continue to disclose the revenue share of [our commitments](#) in our annual reporting.



	2022 target	Status	2030 long-term commitment
<b>Climate</b>	Save 60 million tonnes of CO <sub>2</sub> by enabling low-carbon fuels in the transport sector in 2022	Achieved	Deliver on <a href="#">our commitments to a healthy planet</a> by expanding the reach of our biosolutions that:  Accelerate towards a climate-neutral society  Transform food systems  Enable healthier lives
<b>Water</b>	Reach >4 billion people by providing laundry solutions in 2022 that replace chemicals	Achieved	
<b>Production &amp; consumption</b>	Gain 500,000 tonnes of food by improving efficiency from farm to table in 2022	Not achieved	

## 2022 summary

Our biosolutions in bioenergy helped the transport sector save 65 million tonnes of CO<sub>2</sub> emissions in 2022 by enabling the production of low-carbon fuels.

We reached 4.2 billion people with our laundry solutions. This was mainly driven by broadening the reach of our biosolutions in laundry across emerging markets.

We estimate that 215,000 tonnes of food ingredients were gained in 2022 through the use of some of our biosolutions in grain and vegetable oil processing, and by unlocking additional starch, protein and oils from feed-stocks. We did not achieve the 500,000 tonnes we had planned for due to adoption of some of our biosolutions in selected markets. Across the globe, our biosolutions continue to help improve efficiency from field to table, and we remain committed to [transforming food systems](#).



## Financial

The financial targets give us a clear prioritization of our capital allocation and how to make the best use of our resources to optimize long-term shareholder value creation. We continue to prioritize investments in people, innovation, and capacity to generate the highest potential return of the company. We have increasingly invested in M&A to accelerate our strategic journey and to use the power of biotech to address some of the world's biggest challenges, while unlocking sustainable growth. On December 12, 2022, Novozymes announced the proposed combination with Chr. Hansen to take a further and more significant step on this journey.

Novozyymes is fully committed to its long-term targets until 2025 as they were introduced in 2021. These are: An organic sales CAGR of 5% or higher, an EBIT margin of 26% or higher, and a ROIC including goodwill of 20% or higher. Following the announcement of the proposed combination with Chr. Hansen, Novozymes has assessed costs related to the combination as special items to enable transparent reporting of Novozymes' recurring activities. As such, the financial targets will exclude these costs, which will also be specified separately.



## 2022 summary

Organic sales growth was 9% for 2022 and 6% for 2021.

The reported EBIT margin was 26.0% and 26.4% before special items\*\*.

The ROIC\*\*\* was 17.6% and 17.9% before special items\*\*.

	2025 target*	Status	2030 long-term commitment
<b>Sales</b>	Grow our sales organically by a compounded annual growth rate (CAGR) of 5% or higher	On track	Double reported sales by 2030 vs 2020
<b>Profit</b>	EBIT margin before special items** of 26% or higher, and not below 25% before special items in any individual year	On track	-
	ROIC*** before special items** of 20% or higher	On track	

\* All targets assume constant currencies, no additional acquisitions or divestments beyond what has already been communicated/proposed, no major unusual items, a gradual normalization of the global economy and supply chain, and no new severe disruptions of the global economy or geopolitical environment.

\*\* Special items include costs related to the proposed combination with Chr. Hansen.

\*\*\* Including goodwill.

# Sales outlook

Organic sales growth is expected to be in the range of 4-7%. The full year growth is expected to be driven by a combination of stronger pricing relative to 2022 as well as volume growth. Positive pricing across business areas is expected to contribute more than half of the total organic sales growth, whereas innovation and increased market penetration will be the main components of the volume growth. The outlook assumes no major changes to the current state of the global economic situation. Overall, modest growth is expected in the beginning of the year as the comparator from last year in Food, Beverages & Human Health was impacted by strong sales across sub-areas, and there was a positive timing impact from a large sales order. Additionally, the Q1 comparator in 2022 for Household Care include sales to Russia and Ukraine. Sales in reported DKK including currencies are forecasted to be roughly 2 percentage points lower than the expected organic sales growth range for 2023.

## Business areas

**Household Care** (organic 1% in 12M 2022) organic sales growth is expected to be driven by a combination of pricing and increased penetration in emerging markets. As commodity prices continue to fluctuate and consumers' buying habits adapt to the rising inflation, an expectation of volume contraction in North America and Europe is included, particularly for the first half of the year. Emerging markets are expected to continue to grow, while the market penetration with Freshness solutions will continue. The full-year indication for organic sales in Household Care is to grow in the low single digits.

**Food, Beverages & Human Health** (organic 10% in 12M 2022) organic sales growth is expected across all subareas, driven by Food and Human Health. Solutions focused on health and increased quality as well as clean label will continue to be the main drivers while market conditions favoring industrial bread consumptions, demand for locally sourced products and raw material optimization are expected to support growth. Human Health is estimated to grow

organically in the solid double digits, driven by innovation, cross-selling and segment expansion, supported by the acquisitions of Synergia, Microbiome Labs and PrecisionsBiotics Group. Pricing will be a strong component of growth across all subareas. Organic sales are indicated to grow in the high single digits.

**Bioenergy** (organic 25% in 12M 2022) organic sales growth is expected to be driven by pricing, market penetration enabled by innovation, capacity expansion of corn-based ethanol production in Latin America, and market penetration with enzymatic solutions for biodiesel production. Organic growth will also be supported to a degree by growing sales of solutions for 2G ethanol production. Bioenergy is indicated to grow by a mid-to-high single digit rate. The mid-point of the range assumes flat to slightly declining performance in U.S. ethanol production.

**Grain & Tech Processing** (organic 10% in 12M 2022) organic sales growth is expected to be driven by pricing and growth in Grain led by market penetration in vegetable oil processing and innovation in starch. Tech is expected to decline, driven by reduced sales of enzymes for COVID-19 test kits and a soft textile market. The sales development in Grain & Tech Processing is indicated to grow by a low-to-mid-single digit rate.

**Agriculture, Animal Health & Nutrition** (organic 8% in 12M 2022) organic sales growth is expected to be broad-based with solid growth in both Agriculture and Animal Health & Nutrition. Pricing will be a solid component of growth, and innovation and a more diversified commercial model are enablers for increased market penetration of sustainable BioAg solutions. Growth in Animal Health & Nutrition will primarily be driven by pricing, innovation and end-market growth. The indication for Agriculture, Animal Health & Nutrition is for growth at a rate in the mid-to-high single digits.

# Financial outlook

For 2023, Novozymes expects a solid EBIT margin before special items of 25 to 26% (2022: 26.4%, and additionally excluding one-offs, at roughly 1p.p below the 26.4%). Compared to 2022, the EBIT margin will benefit from price increases, sales growth and productivity improvements. Significantly higher input costs, especially those that are energy-related, a currency headwind, and continued investments in the business as well as lower other operating income are expected to have a negative year-on-year impact. The gross margin is expected to be at a similar level as in 2022, as the positive impact from price increases and productivity improvements are expected to be offset by higher input costs.

		2023 outlook***
Sales performance, organic	%	4-7
EBIT margin before special items*	%	25-26
ROIC** before special items*	%	16-17
<b>For modeling purposes:</b>		
Special items*	DKKbn	0.3-0.7
Net financial costs	DKKm	~250
Effective tax rate	%	~23
Free cash flow before acquisitions	DKKbn	1.8-2.4
Net investments	DKKbn	2.1-2.4

\* Special items include costs related to the proposed combination of Novozymes and Chr. Hansen.

\*\* Including goodwill.

\*\*\* Assumes constant currencies from the date of this announcement and for the remainder of the year.

Return on invested capital (ROIC), including goodwill, before special items is expected at 16% to 17% (2022: 17.9%). Lower NOPAT and higher invested capital, mainly from acquisitions, are the main drivers of the expected year-on-year development.

Free cash flow (FCF) before acquisitions is expected at DKK 1.8 to 2.4 billion (2022: DKK 1.1 billion), mainly impacted by lower net investments.

#### The following is provided for modeling purposes:

The effective tax rate is expected at around 23% for 2023 (2022: 19%).

Net financial costs are expected to be around DKK 250 million (2022: DKK 2 million income) mainly driven by hedging costs and primarily related to USD forward contracts, as well as somewhat higher interest expenses.

Net investments are expected at DKK 2.1 to 2.4 billion (2022: DKK 2.9 billion). This reflects maintenance, optimization and expansion investments, including in new food and health-related customer co-creation centers, as well as roughly DKK 0.4 billion related to the investment in a new state of the art production line for Advanced Protein Solutions in Blair, Nebraska, U.S.

Special items are expected at a range between DKK 0.3-0.7 billion and include cost related to the proposed combination with Chr. Hansen.

# Nonfinancial outlook

In 2023, we will continue working towards our long-term commitments to a healthy planet by investing in the development of biosolutions that improve our climate, water and waste footprints, transform food systems and enable healthier

lives. We will also stay focused on promoting an inclusive and diverse workplace where employees can stay safe, thrive and grow. In addition, we will continue to work together with partners to drive the global sustainability agenda.

#### 2025 nonfinancial milestone targets

<b>Operations</b>	Reduce absolute CO <sub>2</sub> emissions* from operations	65%
	Purchase renewable electricity	100%
	Restore water in basins close to our production sites where WASH is a challenge**	10 billion liters
	Improve freshwater withdrawal by recycling more water**	10%
	Two key circular projects in pilots with demonstrated benefit	2 key projects
<b>Employees &amp; society</b>	Women in senior management	≥ 35%
	Women across all professionals	≥ 45%
	Three-year rolling average of occupational injuries with absence***	≤ 1.5
	Achieve the same score as benchmark on our Thrive Index****	2025 benchmark

\* From a 2018 baseline.

\*\* From a 2021 baseline.

\*\*\* Lost-time injuries per million working hours.

\*\*\*\* Developed from specific questions from our annual employee survey.

# Governance

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# Corporate governance

At Novozymes, we have a proactive and transparent corporate governance structure in place to ensure responsible business conduct and long-term value creation.

## Shareholder authority

Novozyymes is listed on Nasdaq Copenhagen. Shareholders have the ultimate authority over the company and can at shareholders' meetings exercise their right to make decisions about Novozymes, including through the appointment of the Board of Directors. The Board of Directors is accountable to the shareholders for the management of Novozymes. For more information, please see [The Novozymes stock](#).

## Board composition and responsibilities

In accordance with Danish legislation, Novozymes has a two-tier management system comprising the Board of Directors and the Executive Leadership Team, with no individual being a member of both. The division of responsibilities between the Board of Directors and the Executive Leadership Team is clearly outlined and described in the Rules of Procedure for the Board of Directors and the Rules of Procedure for the Executive Leadership Team.

Both of these rule sets are available on our website.

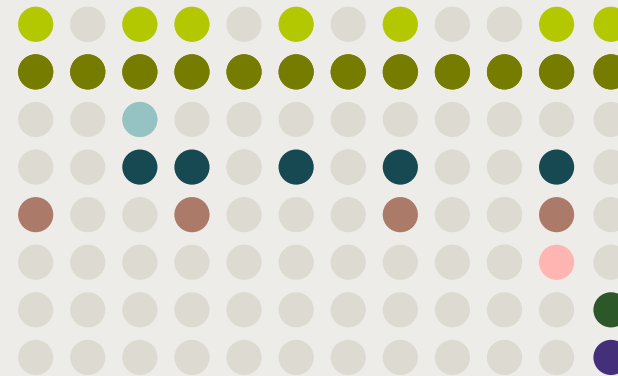
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Novozyymes' Articles of Association require the Board of Directors to have from four to eight members, who are elected at the Annual Shareholders' Meeting. The Board of Directors currently has seven shareholder-elected members, elected for terms of one year. Nominations are based on an evaluation of factors such as competencies, diversity, independence and performance. In accordance with Danish law, the Board of Directors also has four employee-elected members, corresponding to half of the number of board members elected by the shareholders, who serve four-year terms.

The composition of the Board of Directors must ensure that the combined competencies of the Board enable it to inspire, guide and oversee Novozymes' development, and diligently address

## 2022 with the Board of Directors

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



- Ordinary board meetings
- Monthly reports
- Annual Shareholders' Meeting
- Strategy work
- Review of financial performance
- Evaluation of collaboration between the Board of Directors and the Executive Leadership Team
- Organizational performance review and succession planning
- Next year's budget

and resolve the issues and challenges facing Novozymes at any given time.

The individual competencies of the members of the Board of Directors are described in [the Board of Directors resumes](#).

## Governance structure

In accordance with the Articles of Association and the Rules of Procedure for the Board of Directors, the Novozymes Board of Directors has a Chairmanship consisting of two members: the Chair and the Vice Chair. They assist in matters concern-

ing Novozymes' Executive Leadership Team's operational management and report back to the Board of Directors. The Chairmanship is also responsible for planning and preparing board meetings.

## Sustainability integration and governance

Sustainability is an integral part of Novozymes. It drives the way we work, run our operations, bring our biosolutions to customers, and engage with the communities we are a part of. It is deeply embedded into our purpose "Together we find biological answers for better lives in a growing world – Let's Rethink Tomorrow" and our strategic direc-

## Proposal of candidates to the Board of Directors

In the election of Novozymes' board members to be held at the Annual Shareholders' Meeting on March 2, 2023, the Board of Directors proposes the reelection of six members. All candidates are standing for one-year terms.

After 12 years as a member of the Novozymes' Board of Directors, Jørgen Buhl Rasmussen has decided not to seek reelection at the Annual Shareholders' Meeting on March 2, 2023. Through the past six years, Jørgen has served as the Chair of the Novozymes' Board of Directors. During his tenure, Jørgen has played a pivotal role in developing and transforming the company by establishing a more well-founded growth journey. This includes a greater focus on portfolio prioritization and a stronger commercial agenda, as well as a more aligned nomination and remuneration strategy. The Board is highly appreciative of Jørgen's instrumental role in the process leading up to the proposed combination of Novozymes and Chr. Hansen.

Additionally, the Board also wishes to express its gratitude for Jørgen's strong

commitment to sustainability and his long-standing impact on Novozymes.

The Board proposes the election of Cornelis (Cees) de Jong as the new Chair of the Board. Cees has been the Vice Chair of the Board since 2020. The Board proposes Cees based on his extensive international business and management experiences from the food, food ingredient and industrial biotech industries, latest as the CEO of Chr. Hansen.

The Board is proposing the election of Kim Stratton as Vice Chair. Kim has served on the Board since 2017. Throughout her tenure, Kim has served on the Nomination and Remuneration Committee, and she has also served on the Innovation Committee since 2020. The Board proposes Kim based on her broad global commercial experience, including across emerging markets. Her skills also span innovation pipeline management, sustainability integration and external affairs.

Learn more about the proposal of candidates to the Board of Directors on our website.

Visit 

tion. Novozymes' purpose and values are reviewed regularly by the Board of Directors to ensure that they remain sound and relevant in steering Novozymes forward, nurturing our unique culture and being a responsible corporate citizen. The Board of Directors is also focused on ensuring that Novozymes' purpose, values and culture play a key role in business decisions.


Sustainability is governed at the highest level by the Board of Directors and the Executive Leadership Team, and Novozymes' performance on key environmental, social, and governance (ESG) matters is linked to executive remuneration through nonfinancial targets.

Please see our Remuneration Report for more details.

Visit 

The Board of Directors is responsible for overseeing financial and nonfinancial performance as part of the Executive Leadership Team's day-to-day running of Novozymes, as well as ensuring a responsible corporate conduct and long-term perspective.

Read more about our sustainability governance on our website.

Visit 

In 2022, the Board of Directors continued to discuss sustainability integration in Novozymes from a commercial and operational perspective, and it was a key topic at an off-site meeting during the year. They further agreed to include an annual sustainability deep-dive as a fixed item on the Board agenda, where different topics will be covered.

Furthermore, the Board focused on ensuring that Novozymes is on the right track to reach net-zero emissions from our operations and supply chain by 2050, and the Board will continue to regularly review progress on our [nonfinancial targets](#). The Board also considered sustainable conduct and held digital meetings to reduce the CO<sub>2</sub> footprint of travel and enable better access for members across the world.

*“The Board of Directors, the Executive Leadership team and employees are collectively responsible for integrating sustainability into Novozymes. It is deeply embedded in the way we conduct our business, and it drives our strategic direction from our innovation pipeline, to our supply chain, and to the commercialization of our products. This is what shareholders and stakeholders expect of us, it is part of our DNA, and it is the right way to do business,”*

– Jørgen Buhl Rasmussen, Chair of the Board.

### Diversity in the Board of Directors

Novozyymes has a policy for diversity and equal opportunities, which covers our workforce and the Board of Directors. Ambitious diversity targets are in place for the Board of Directors to ensure the right mix of skills and competencies to address the challenges of a large global company.

The Board Competency Profile reflects the targets that have been defined for all competencies required on the Board of Directors

[Visit](#)

In 2021, Novozymes set a target on gender diversity for shareholder-elected board members, which states that 40% or more must be female

and 40% or more must be male. With the announcement of Jørgen Buhl Rasmussen not seeking reelection to the Board of Directors at the Annual Shareholders' Meeting in 2023, the gender balance of shareholder-elected board members will improve from 29% to 33%. However, we will not meet our target as we have decided to postpone the addition of new board members until the completion of the proposed combination of Novozymes and Chr. Hansen.

Despite not meeting our own gender diversity target, the composition of the Board of Directors meets the gender diversity requirements set out in Danish legislation. Disclosures on gender diversity at other management levels can be found in the [Note on Inclusion & diversity](#).

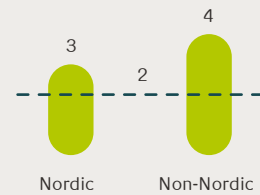
#### Diversity targets for board members elected by shareholders

● Actual  
--- Target

- \* The targets apply to shareholder-elected board members.
- \*\* 40% or more of shareholder-elected board members must be female, and 40% or more must be male no later than by the Annual Shareholders' Meeting to be held in 2023.
- \*\*\* Member holds current full-time executive position or has held a full-time executive position within previous five calendar years.

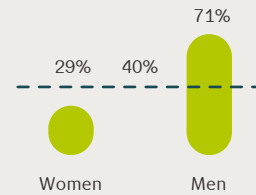
#### Nationality

Target achieved



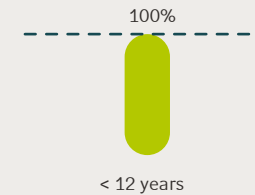
#### Gender\*\*

Target not achieved



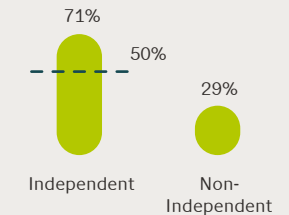
#### Tenure

Target achieved



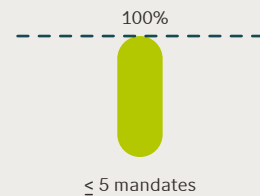
#### Board governance structure

Target achieved



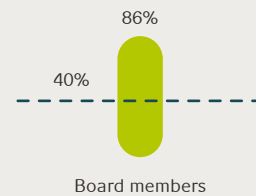
#### Number of mandates in listed companies incl. Novozymes

Target achieved



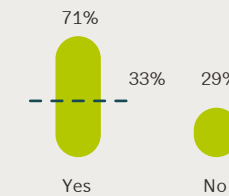
#### Has substantial international experience

Target achieved



#### Executive position\*\*\*

Target achieved



#### Lived and worked outside the Nordic countries

Target achieved



## Board committees

The Board of Directors has three permanent committees: The Nomination and Remuneration Committee, the Audit Committee, and the Innovation Committee. Committees covering specific topics may also be formed on an ad-hoc basis.

### The Nomination and Remuneration Committee

The Nomination and Remuneration Committee assists the Board of Directors in nominating candidates for the Board of Directors, board committees and the Executive Management, as well as proposing the remuneration of members of the Executive Management, the board members and board committee members. The Nomination and Remuneration Committee meets as necessary, but always at least twice a year. The Committee held four meetings in 2022 with an attendance rate of 100%. Members of the Committee in 2022 were Jørgen Buhl Rasmussen (Chair), Cees de Jong, Kim Stratton and Kasim Kutay.

Subjects dealt with at meetings cover both fixed topics that are reviewed regularly according to the Committee's annual cycle and other items identified for discussion during the year.

More information can be found in the Charter of the Nomination and Remuneration Committee.

Visit [↗](#)

In 2022, some of the significant topics covered were updated benchmarking of management remuneration and various topics related to the proposed combination with Chr. Hansen.

### The Audit Committee

The Audit Committee assists the Board of Directors in overseeing aspects relating to accounting, auditing, risks, internal controls and financial, tax, treasury, environmental, social and governance data. The Audit Committee meets as necessary, but always at least four times a year. The Committee held four meetings in 2022, all with a 100% attendance rate. Members of the Committee in 2022 were Heine Dalsgaard (Chair), Jørgen Buhl Rasmussen and Cees de Jong.

Information on members, qualifications, self-assessment and recurring tasks, etc. can be found in the Charter of the Audit Committee.

Visit [↗](#)

Novozymes' Audit Committee reviews all reports from the global corporate whistleblower system for reporting of suspected illegal or unethical misconduct within Novozymes. See more in the Note on [Business ethics](#).

Significant topics covered in 2022 were a review of risks related to the war in Ukraine, a follow-up on the integration of acquired companies and related assets, a review of capital structure initiatives, climate risk management, the selection process of new independent auditor candidates for the 2024 Annual Shareholders' Meeting, and various other topics related to the proposed combination with Chr. Hansen.

### The Innovation Committee

The Innovation Committee assists the Board of Directors with the review of Novozymes' overall capabilities and strategic direction when it comes to technology, science and innovation. The Innovation Committee meets as necessary, but always at least twice a year. The Committee held four meetings in 2022, all with a 100% attendance rate. Members of the Innovation Committee in 2022 were Sharon James (Chair), Kim Stratton, Morten Sommer, and Preben Nielsen.

Information on members, qualifications, self-assessment, and recurring tasks, etc. can be found in the Charter of the Innovation Committee.

Visit [↗](#)

Several topics were covered in 2022, including progress in the agile transformation across R&D, a revised innovation strategy for core business areas, the R&D pipeline strategy and progression, operating and innovation models for R&D, as well as regulatory and technology strategies.



### Charters and recommendations

When laying down the management principles for Novozymes, the Board of Directors followed the Recommendations on Corporate Governance that form part of the disclosure requirements applicable to companies listed on Nasdaq Copenhagen.

A detailed review of Novozymes' position on each of the recommendations, and a description of the internal control and risk management system relating to financial reporting, can be found in the report on corporate governance prepared pursuant to section 107b of the Danish Financial Statements Act.

These recommendations require companies to comply or explain any deviations. Novozymes follows 39 of the 40 recommendations, the one exception being:

- Due to the limitations imposed by the Novo Nordisk Foundation's Articles of Association and Novozymes' ownership structure, the Board of Directors reserves the right in certain circumstances to reject takeover bids without consulting the shareholders. (Recommendation 1.3.1).

In addition, under the Danish Financial Statements Act (sections 99a), it is mandatory for large companies to report on corporate social responsibility. The Notes on [Environmental data](#) and [Social and governance](#) in this report meet the requirements of section 99a in the Danish Finan-

cial Statements Act. The mandatory reporting is placed in the Notes as the content is provided with reasonable assurance by our auditors.

Novozyymes has a data ethics policy, which sets out the overall principles for the ethical management of data by Novozymes and supplements our commitment to integrity and compliance. The statutory report on Novozymes' policy for, and work with, data ethics pursuant to section 99d of the Danish Financial Statements Act can be found on our website.

#### The statutory reports required by the Danish Financial Statements Act are published on our website:

- Corporate governance (§107b)
- Diversity (§107d)
- Gender diversity (§99b)
- Data ethics (§99d)

<https://investors.novozymes.com/investors/corporate-governance/articles-of-association-and-reports-on-corporate-governance/>

Visit 



Novozyymes is also committed to the ten principles of the U.N. Global Compact (UNGC) and as a continuing member of the UNGC we prepare an annual Communication on Progress (CoP).

Our UNGC CoP reports can be found on our website.

Visit 

#### Other governance-related information

The attendance rate of the meetings in the Board of Directors in 2022 was 97%.

Any amendments to the Articles of Association require that shareholders representing at least two thirds of the total number of votes in the company are represented at a shareholders'

meeting, and that at least two thirds of the votes, as well as two thirds of the voting capital represented at the meeting, are cast in favor of the proposal to amend the Articles of Association.

The Board of Directors has been authorized by the shareholders to allow the company to acquire treasury stock on an ongoing basis, provided the nominal value of the company's total holding of treasury stock does not exceed 10% of its share capital at any time, cf. section 198 of the Danish Companies Act. The purchase price must not deviate by more than 10% from the price quoted on Nasdaq Copenhagen at the date of acquisition. This authorization applies until April 1, 2023. In addition, the Board of Directors is authorized to reduce the share capital.

Each year, one of the responsibilities of the Board of Directors is to assess whether the capital and share structure of Novozymes is optimal. In 2022, the Board of Directors assessed that the share structure with A and B common stock continues to be the best way to safeguard Novozymes' long-term strategy and development for the benefit of the company's shareholders and other stakeholders. Regarding its capital structure, Novozymes will continue to favor a rather modestly leveraged balance sheet, as reflected by a target for net

interest-bearing debt of around 1x EBITDA. Thus, the capital structure is in line with the target.

Novozymes is party to several partnership contracts that can be terminated by the other party in the event of significant changes to the ownership or control of Novozymes. A few of these contracts contain provisions that restrict Novozymes' licenses to use specific forms of technology in such situations.

### Evaluation of the Board of Directors

The Board of Directors conduct an annual evaluation, and every three years, the evaluation is conducted by an external third party, last time being in 2021. In 2022, the evaluation of the Board of Directors was conducted by the Chair who interviewed each member of the Board and the Executive Leadership Team. The evaluation revealed an overall good performance by the Board and good collaboration between the Board the Executive

Leadership Team. The recommendations from the interviews included continuing the strong focus on BioHealth and Human Nutrition, maintaining a good balance between working in the board committees versus the full Board of Directors, and ensuring a continued interplay between sustainability, culture, business investments and prioritizations. In addition, the Board continued to focus on the results from the external evaluation from 2021.

Board member	Audit Committee member	Nomination and Remuneration Committee member	Innovation Committee member	Board meetings attended %	Board tenure	End of Board tenure	Share trading in 2022	Number of shares end of 2022
Jørgen Buhl Rasmussen <sup>1,2</sup>	●	● (Chair)		100	2011	2023	-	5,500
Cees de Jong <sup>1,2</sup>	●	●		100	2020	2023	-	2,000
Heine Dalsgaard <sup>1</sup>	● (Chair)			100	2020	2023	-	3,000
Sharon James <sup>1,2</sup>			● (Chair)	100	2020	2023	-	-
Kasim Kutay <sup>1</sup>		●		89	2017	2023	-	217
Kim Stratton <sup>1,2</sup>		●	●	100	2017	2023	-	-
Morten Sommer <sup>1,2,5</sup>			●	83	2022	2023	-	-
Mathias Uhlén <sup>1,4</sup>				50	2007	2022	-	-
Anders Hentze Knudsen <sup>3</sup>				100	2013	2025	-	-
Anne Breum <sup>3</sup>				93	2021	2025	-	319
Preben Nielsen <sup>3</sup>			●	100	2021	2025	-	426
Jens Øbro <sup>3</sup>				100	2021	2025	-	557

1. Elected at the Shareholders' Meeting. 2. Independent. 3. Employee representative. 4. Resigned from the Board on March 16, 2022. 5. New member of the Board from March 16, 2022.

# Board of Directors

Novozymes' Board of Directors has seven members, who are elected at the Annual Shareholders' Meeting, and four employee-elected members. The Board represents many years of international management experience, and the members' competencies combine to ensure expert management of the company.

## Jørgen Buhl Rasmussen



Born 1955. Danish. CEO of Buhlras ApS. Chair of the Board since 2017. Adjunct Professor at Copenhagen Business School. Member of the Audit Committee and Chair of the Nomination and Remuneration Committee. Member of the Board since 2011. Elected for a term of one year.

### Board positions

*Chair:* F. Uhrenholt Holding A/S, Advisory board of Blazar Capital and the Board Sustainability Committee in Smurfit Kappa Group.

*Member:* Smurfit Kappa Group and ISH ApS.

### Special competencies

Extensive international business and management experience, specifically within sales, marketing, branding, acquisitions, and financial and accounting expertise across many businesses, sectors, and geographies, as well as working across diverse teams.

Improving sustainability integration into corporate goals and commitments, board governance and diversity. Ensuring a broad perspective on sustainability, recognizing that climate change is one immediate challenge, but keeping other issues in mind.

## Cees de Jong



Born 1961. Dutch. Vice Chair of the Board since 2020. Member of the Audit Committee and the Nomination and Remuneration Committee. Member of the Board since 2020. Elected for a term of one year.

### Board positions

*Chair:* Oterra A/S, Oterra Operations ApS, Oterra Holding ApS, Spring TopCo DK ApS, Spring MidCo ApS and Meatable B.V.

### Special competencies

Extensive international business and management experience from a range of industries, such as the food, food ingredient and industrial biotech industries, as well as financial and accounting expertise. Pioneered to embed sustainability into strategy, operating model and reporting, ensuring a meaningful, positive corporate societal impact.

## Heine Dalsgaard\*



Born 1971. Danish. Group CFO of IVC Evidensia Ltd. Chair of the Audit Committee. Member of the Board since 2020. Elected for a term of one year.

### Board positions

*Member:* Pandora A/S.

### Special competencies

Extensive international business and management experience from a range of industries, as well as a broad financial background, mergers and acquisitions experience and accounting expertise. Experience in sustainability reporting, including assurance requirements.

\* This board member is not regarded as independent in the sense of the definition in the Danish Recommendations on Corporate Governance that apply to Danish listed companies.

## Sharon James



Born 1961. British. Chair of the Innovation Committee. Member of the Board since 2020. Elected for a term of one year.

### Board positions

*Member:* Mölnlycke Health Care.

### Special competencies

Broad international experience in commercial research and innovation pipeline management in the consumer goods and consumer products sector. Experience in sustainability integration into innovation processes.

# Board of Directors

## Kasim Kutay\*



Born 1965. British. CEO of Novo Holdings A/S. Member of the Nomination and Remuneration Committee. Member of the Board since 2017. Elected for a term of one year.

### Board positions

*Member:* Novo Nordisk A/S.

### Special competencies

Broad experience within biotechnology, strategy, business development, mergers and acquisitions, and financial and accounting expertise.

\* This board member is not regarded as independent in the sense of the definition in the Danish Recommendations on Corporate Governance that apply to Danish listed companies.

## Kim Stratton



Born 1962. Australian. CEO of Centogene NV. Member of the Nomination and Remuneration Committee and the Innovation Committee. Member of the Board since 2017. Elected for a term of one year.

### Board positions

*Member:* Recordati S.p.A.

### Special competencies

Broad global biopharmaceutical commercial experience, including emerging markets, innovation pipeline management and external affairs.

## Morten Otto Alexander Sommer



Born in 1981. Danish. Professor, Microbiology at the Technical University of Denmark (DTU) and Chief Scientific Officer of UNION therapeutics A/S. CEO Manjin ApS. Member of the Innovation Committee. Member of the Board since 2022. Elected for a term of one year.

### Board positions

*Chair:* Clinical-Microbiomics A/S.

*Member:* SNIPR Holdings ApS, SNIPR Biome ApS, UNION therapeutics A/S, UTILITY therapeutics Ltd.

### Special competencies

Extensive experience in biotechnology research and development with special focus on bacterial synthetic biology, as well as broad experience in biotechnology entrepreneurship.



# Board of Directors

**Anne Breum\***



Born 1961. Danish. Laboratory technician. Employee representative.

Member of the Board since 2021. Elected for a term of four years.

**Anders Hentze Knudsen\***



Born 1959. Danish. Senior Operator. Employee representative.

Member of the Board since 2013. Elected for a term of four years.

**Preben Nielsen\***



Born 1966. Danish. Science manager. Employee representative.

Member of the Board since 2021. Elected for a term of four years. Member of the Innovation Committee.

**Jens Øbro\***



Born 1977. Danish. Senior Professional. Employee representative.

Member of the Board since 2021. Elected for a term of four years.

\* In accordance with Danish law, the Board of Directors includes four employee-elected members, who serve four-year terms.

# Executive Leadership Team

Our eight-member Executive Leadership Team comprises broad and international management experience, comprehensive biotechnology expertise, sustainability leadership and in-depth knowledge of Novozymes' business.

## Ester Baiget



Born 1971. Spanish. President and CEO.

### Education

Holds a chemical engineering degree and an MBA from the Rovira i Virgili University, Spain.

### Board positions

Member of the AkzoNobel Supervisory Board.

### Special competencies

Ester Baiget is an experienced international leader with a strong business and technical background. With more than 25 years of international experience as a technical and commercial business leader, Ester has driven transformational change, enhanced profitability, and set a strong foundation for sustainable growth across a diverse range of industries. Through her leadership, she develops and nurtures a culture of inclusion, engagement, and commitment to delivering strong results.

Ester anchors sustainability across Novozymes, ensuring it is integrated in the company's commitments and strategy. She is also a Novozymes ambassador on the global stage and an advocate of biotech as an instrumental enabler of a healthier planet.

## Lars Green



Born 1967. Danish. CFO and Executive Vice President.

### Education

Holds an M.Sc. in Business Administration from Aarhus University, Denmark.

### Board positions

*Member:* Board of Directors of LEO Pharma. Board of trustees of the LEO Foundation and LEO Holding.

### Special competencies

Lars Green is responsible for the Finance, IT & legal functions.

Lars has in-depth knowledge of the Novo Group's business, international experience from managing global biotechnology and biopharma companies, and leverages his financial expertise to drive value creation across the company. Lars ensures transparent disclosure of Novozymes' sustainability performance and compliance to the company's policies and standards.

## Amy Byrick



Born 1974. Canadian. Executive Vice President, Strategy & Business Transformation.

### Education

BScE in Chemical Engineering from Queen's University, Canada, and an MBA from INSEAD, France.

### Special competencies

Amy Byrick is responsible for strategy, commercial excellence, digital transformation, and for building new businesses in strategic opportunity areas and ventures. She also ensures that sustainability is a key part of Novozymes' strategy and new business development focus.

Amy brings years of international experience driving strategic transformation with a focus on post-merger integration, commercial excellence, and on building an inclusive, high energy, growth- and results-oriented organizational culture.

## Tina Sejersgård Fanø



Born 1969. Danish. Executive Vice President, Agriculture & Industrial Biosolutions.

### Education

Holds an M.Sc. in Chemical Engineering from the Technical University of Denmark (DTU) and a diploma degree in Innovation, Strategy and Marketing in the Food & Beverage industry from SIMI (CBS executive, Denmark).

### Board positions

*Member:* DLF Seeds & Science.  
*Member:* Kemira Oyj.

### Special competencies

Tina Sejersgård Fanø is responsible for application research, technical service, sales and marketing in Agriculture & Industrial Biosolutions.

Tina has significant experience in developing and managing global partnerships and has been instrumental in negotiating several major business deals for Novozymes over the years. She has strong biotech insights spanning R&D, marketing and sales. She ensures that sustainability is integrated as a key value proposition across her business areas, and she has a strong focus on enhancing diversity and inclusion in her organization.

# Executive Leadership Team

## Claus Crone Fuglsang



Born 1968. Danish. CSO and Executive Vice President, Research & Development.

### Education

Holds an M.Sc. in Biochemistry from the University of Copenhagen and an MBA from Heriot-Watt University, Edinburgh Business School, Scotland, supplemented with courses at MIT, Boston and IMD, Lausanne.

### Board positions

*Member:* Microbiogen Ltd., Biobased Industries Consortium, Erhvervspræsidiat for TekTanken.

### Special competencies

Claus Crone Fuglsang is responsible for Enzyme and Microbe Research, Product & Process Development, Regulatory Affairs and Product Safety, Intellectual Property & Licensing and R&D Portfolio & Projects.

Claus has strong leadership experience within R&D functions along with driving and leading partnership innovation programs. He also has significant international research and business experience. Claus also ensures that sustainability is embedded into Novozymes' innovation pipeline.

## Anders Lund



Born 1973. Danish. Executive Vice President, Consumer Biosolutions.

### Education

Holds an M.Sc. in Economics from Aarhus University, Denmark.

### Special competencies

Anders Lund is responsible for application research, technical service, sales and marketing in Consumer Biosolutions including Household Care and Food & Beverages.

Anders has a strong commercial and strategic background and has played a significant role in shaping and executing Novozymes' strategies over the last two decades. He has led several of Novozymes functions and regions, including the global supply chain, global marketing as well as Novozymes North and South America. He also has extensive experience in building customer relationships in several of Novozymes' business areas, and he ensures that sustainability is a key driver and differentiator in customer engagements.

## Graziela Chaluppe dos Santos Malucelli



Born 1973. Brazilian/Italian. COO and Executive Vice President, Operations, Supply & Quality.

### Education

Holds an M.Sc. in Food Engineering from Pontifical Catholic University of Paraná, Brazil.

### Special competencies

Graziela Chaluppe dos Santos Malucelli is globally responsible for Operations, Supply Chain, Planning & Product coordination, Engineering, Facility Services, Sourcing, Quality, Environment & Safety. Graziela is also responsible for driving sustainability across Novozymes' operations, supply and quality, as well as across the value chain.

Graziela has extensive experience from leadership roles in Brazil, the U.S., China, India, and Denmark on executing strategies and developing the organization. Over the years, she has been driving productivity and a global supply network of biosolutions with a strong customer focus.

## Morten Enggaard Rasmussen



Born 1976. Danish. Executive Vice President, People, Sustainability & Brand.

### Education

Master of Science degree from the Aarhus School of Business.

### Special competencies

Morten Enggaard Rasmussen is responsible for Novozymes' people agenda, sustainability leadership and brand. He is also responsible for managing our non-financial impacts related to employees and society.

Morten has a strong track record of building and developing high-performance teams across the globe with a particular focus on responsible business. He has managed complex, international development projects and has operated as a trusted business partner across various functions and geographies. Morten advances Novozymes' sustainability leadership position internally and externally and focuses on ensuring a diverse and inclusive workplace.

# Risk management

Novozymes operates in a global environment across many industries, which means that our business is exposed to different risks. We have a risk management framework in place to identify, assess, and mitigate business risks that may impact our ability to grow our business sustainability and be a reliable partner to our customers and the communities we operate in.

In addition to addressing key business risks, which could potentially materialize in the short term (within the next three years), we also identify long-term and strategic risks across categories such as sustainability and technology. We seek to have an integrated and holistic approach to assessing and prioritizing financial and nonfinancial risks on similar terms.

## 2022 risk updates

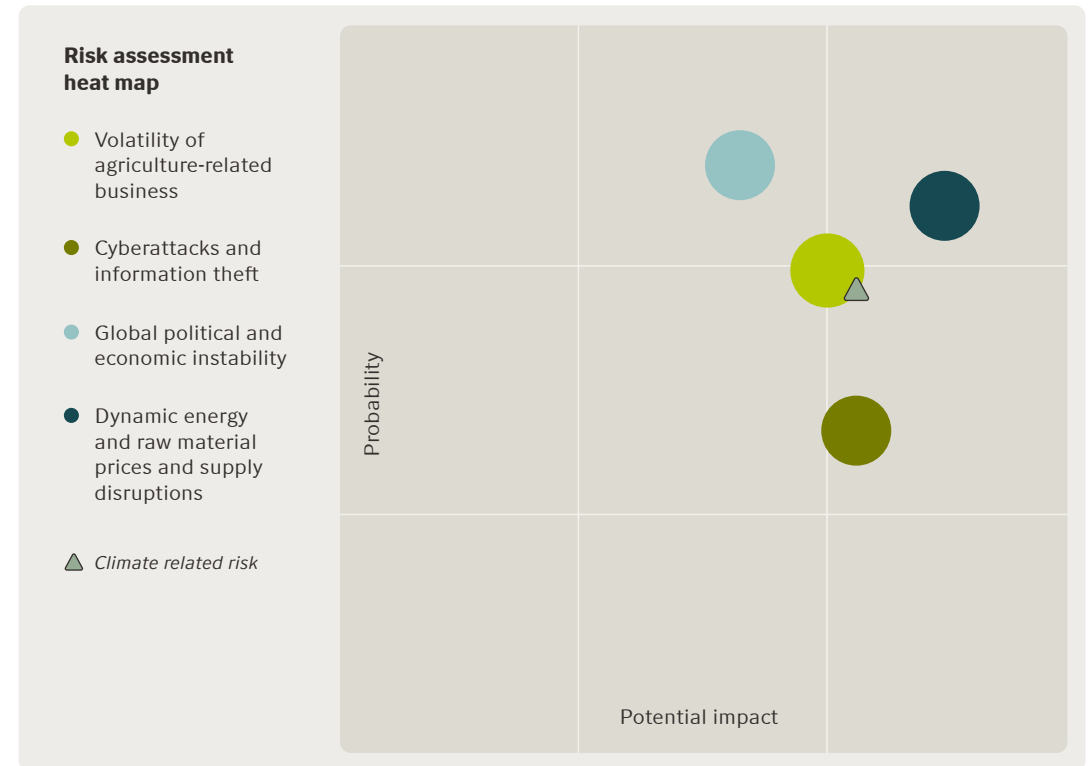
Geopolitical tensions intensified in 2022, spurred by the war in Ukraine. This led to increased volatility in energy and raw material costs and global supply chain disruptions. Novozymes is impacted by these factors, and we therefore include them into a combined business risk for 2023.

Climate-related risks, such as extreme weather events, are important factors when we look at the

risks to our business. We address them in a structured way where they are identified, managed, and reported at different levels of our organization in the same manner as other business risks. In 2022, we focused on further integrating and developing climate change risk management in our risk management framework, in alignment with our commitment to TCFD (Taskforce on Climate-related Financial Disclosures). In 2023, we will continue to work on how to further strengthen the management of ESG risks to our business. Read more about our reporting to [TCFD here](#).

## Risk management process

The Board of Directors has the overall responsibility for overseeing risks and for maintaining a robust risk management and internal control system. Novozymes operates an Enterprise Risk Management (ERM) process in which key enterprise risks



(financial and nonfinancial) are identified, assessed, reported on, and mitigated at different levels of the organization. Each key risk is assigned to a risk owner from the Executive Leadership Team and a Risk Responsible.

The Risk Management & Controls department is responsible for ensuring that senior management

promotes risk awareness, engagement, and ownership across the organization. Risks are assessed based on a two-dimensional heat map rating system that estimates the potential impact of a given risk on financials and reputation, and the likelihood of that risk materializing. The most significant key risks are reviewed and assessed by the Executive Leadership Team and the Board of Directors.



# Key business risks for 2023

▲ Climate related risk

## Volatility of agriculture-related business

### Description of risk

Several of our businesses may potentially be affected by agriculture-related events such as weather, volatile commodity prices or economic recession in one or more geographical regions, all of which can impact several sectors of the agricultural value chain.

A substantial economic downturn could pressure commodity prices and lead to lower demand and margins in commodity-related business areas where we operate, such as in grain and oil processing and bioethanol production. For example, reduced economic activity in North America or Europe could lead to reduced demand for bioethanol production and starch processing. A significant upward pressure on commodity prices due to shortages could also impact our customers' ability to source and process commodities such as grains. This could put pressure on our sales of biosolutions.

### Mitigating actions

Our biosolutions are more relevant than ever at a time of increased and more volatile commodity prices. They enable producers to generate more yield from the same input, and therefore create more value for many of our customers across the agriculture value chain.

In 2022, we continued to work with grain, oil, and ethanol customers to maximize their yields and to diversify their businesses by enabling alternative value streams. In addition to making production processes more effective, our biosolutions can also help customers to produce more protein, oil and more fiber. We also continued to explore opportunities to use bioenergy feedstocks for other products, such as renewable fuels for heavy transport and as building blocks for renewable chemicals.

Going forward, we will continue to leverage our expertise to help customers address agricultural challenges with biosolutions and to diversify their revenue streams. We will also work to continually optimize our internal commercial competences, including technical sales support and digital tools for process optimization.

## Cyberattacks and information theft

### Description of risk

The threat of cyberattacks is high due to increased digitalization and the lack of internet regulations and legislation.

Novozymes' business is fully IT-supported, and our supply chain, logistics and production functions are highly digitalized. Cyberattacks could have a negative impact on our productivity if systems are not accessible for an extended period of time. In addition, new mergers and acquisitions could increase our vulnerability to cyberattacks.

Our business could also be adversely impacted if information about our unique technologies or production strains is disclosed. It is extremely important that we ensure that our business continues to run, and that we safeguard sensitive business data and critical assets against this global threat.

### Mitigating actions

It is a key focus area for Novozymes to increase our ability to identify, protect, detect and respond to cyberattacks. In 2022, we tested and implemented several initiatives to strengthen our IT emergency response. We also increased our focus on measuring our actual security level and getting better transparency in infrastructure and system management.

To protect our business opportunities from the threat of global theft, we maintain a strong focus on patents and IP management, as exemplified by our more than 6,500 granted or pending patents. A dedicated cyber defense unit in Novozymes has greatly enhanced our ability to rapidly detect and respond to cyber and information security incidents. We will continue to expand our capabilities with new data sources and intelligence in 2023.

We will also retest our cyberattack resilience and measure our security level to gain actionable data. We will also improve our ability to access devices in our network to apply protection in selected areas and isolate zones in case of cyberattacks. As our business expands, we will increase our focus on mitigating IT risks across new business areas.

## ● Global political and economic instability

### Description of risk

Our global footprint exposes our business to the consequences of global political and economic instability, which escalated during 2022. The war in Ukraine led to sanctions, which impacted trade conditions and imposed uncertainties to the global economy and financial markets.

In addition, the war has led to increased volatility in raw material and energy prices, as well as energy security issues in the EU – see next risk. These conditions combined could impact our business and make it difficult for Novozymes to optimize decisions beyond the short-term.

### Mitigating actions

In 2022, Novozymes closely monitored the political and economic developments with an agile mindset to ensure that fast action can be taken when needed. We also deployed global versus local scenarios and considerations in short- and long-term capacity planning, e.g. shifting production from one site to another.

We continue to champion the benefits of globalization and a shared commitment to sustainability on the global stage, such as at the U.N. General Assembly and COP27. We also collaborate with many valuable partners to drive a responsible business agenda, such as the World Economic Forum, the International Chamber of Commerce, The B Team, the U.N. Foundation and Business Fights Poverty.

In 2023, we will continue to closely follow political and economic developments and identify scenarios and potential preparatory actions.

## ● Dynamic energy and raw material prices and supply disruptions

### Description of risk

The world faced challenging market conditions in 2022 following the impact from the COVID-19 pandemic on global supply and logistics, and the impact from the war in Ukraine. These include high, volatile energy and raw material prices and supply chain disruptions.

These ongoing conditions could mean that prices remain volatile and at higher price levels than previously, exposing Novozymes to significant price fluctuations. This could imply a risk to our gross margin level, amongst others. In addition, continued geopolitical unrest and the European energy crisis could lead to supply disruptions for Novozymes.

### Mitigating actions

In 2022, we worked closely with customers on pricing actions based on price trends in the market to ensure that we capture a fair share of value from our biosolutions. Our biosolutions enable customers to get more from the same raw materials, which is a key benefit in today's environment.

Throughout 2022, we also continued to monitor our production and supply, prepared potential substitution with alternative raw materials if needed, and reduced our dependency on critical and single-sourced raw materials. Our safety stocks ensure that we can continue to produce.

In 2022, we ensured that our production sites in Europe are independent of natural gas. We continue to focus on our decarbonization journey and purchased 82% renewable electricity in 2022. We have a target to purchase 100% renewable electricity by 2025, which was previously set to 2030.

During times of change, predictability and agility are key to mitigate business risks. In 2023, we will continuously focus on mitigating price fluctuations and secure supply.

# Long-term risks

In addition to the key enterprise risks, Novozymes also monitors strategic and fundamental risks that can potentially impact our business in the long-term (beyond three years), the impact and likelihood of which are difficult to quantify at the present time.

These risks span across different risk categories including sustainability and technology. Through our integrated sustainability trendspotting exercise, we identify long-term risks and opportunities, and the risks are jointly assessed through our Enterprise Risk Management process.

We engage with relevant stakeholders in a timely manner to develop strategies and ensure that we are prepared to take adequate action and respond to key long-term risks.

Based on our 2022 risk assessment, the following continue to be some of the most significant long-term risks:



## ● New and emerging technologies

### Description of risk

Industrial biotech is a key enabling technology for the delivery of low-carbon and biobased solutions. Novozymes' research and business are based on innovation and delivering biosolutions that can tackle some of the biggest challenges of today and tomorrow.

Going forward, we expect to see the emergence of new technologies and innovative uses of current technologies, including gene editing, to find safe and innovative answers for carbon capture, sustainable food systems or replacing chemicals with biodegradable solutions.

New or rapidly changing technologies could pose a risk to Novozymes' technology base if we do not stay updated.

### Mitigating actions

We continuously monitor and assess new technologies, and we apply and promote safe and responsible use of biotech. We are committed to continuously learn and share our knowledge about the potential of biotech and its safe use.

Through proactive engagement with influencers and policy makers, we broaden the understanding of biotech, paving the way for future solutions to pressing challenges. We advocate for science-based and innovation-friendly policy frameworks for the introduction of solutions based on new gene technologies.

Through our cooperation with the Novo Nordisk Foundation, we are exploring ways to provide new documentation and insights into biotech. We engage with the World Economic Forum's community and to promote biosolutions, and we drive the innovation agenda through business and industry organizations to ensure that we do our best when searching for better answers.

We will accelerate the actions above in the coming years in order to mitigate any potential impacts.

Learn more in our position statement on Industrial Biotechnology.

Visit [↗](#)

## Water scarcity due to climate change

### Description of risk

Climate change is becoming increasingly visible in more extreme weather events. However, the effect of climate change on water access through extreme weather events is currently a top concern.

Our technology is dependent on the availability of fresh water across our value chain as many of our raw materials are agricultural and water-intensive to produce. Increased long-term pressure on fresh water is a key risk driven by climate change. A severe drought, reduced water supply, poor water quality, or flooding all lead to water stress and limit our ability to meet customer demand by directly impacting our own operations or our supply chain.

### Mitigating actions

We continue addressing this long-term risk through our water stewardship strategy that is guided by SDG #6, and we use a science-based approach to manage water according to local conditions at our production sites.

We have developed context-based water programs for our sites\*, and we intend to pursue a science-based approach for addressing water quality and quantity challenges at our priority sites. We also aim to improve our freshwater withdrawal, by focusing on recycling within our own operations. Learn more about our [nonfinancial targets here](#).

To help achieve overall water security in the basins where our production sites are located, we work with external stakeholders to address relevant water challenges. In 2022, we initiated water restoration projects at our sites in China that aim to improve ecosystem services as well as water security through wetland restoration. At our site in Mumbai, India, we work with local communities to solve water, sanitation and hygiene challenges.

We disclose more details annually in CDP's Climate Change and Water Security questionnaires.

[Visit](#) 

\* The targets do not include sites with activities not considered to have a significant environmental impact, e.g. sales offices, R&D labs, etc.









# Taskforce on Climate-related Financial Disclosures

At Novozymes, we are fully committed to doing our part to accelerate towards a climate-neutral society. We actively invest in lowering the carbon footprint of our operations and supply chain as well as delivering biosolutions that address many of the climate-related challenges facing the world.

Environmental transparency is the essential first step in addressing and taking action on current and future risks and opportunities associated with climate change. In 2022, Novozymes was named on CDP's Climate Change A List for our commitment to environmental transparency and action on climate change. We also received A- for our water security disclosures, which recognizes our good water management practices.

Novozymes strongly supports the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). We recognize that communicating climate-related impacts not only helps us understand and manage climate-related issues better, but that this also provides important insights to our stakeholders. The relevant sections for TCFD reporting are integrated in our annual report and outlined in the table and CDP responses.

TCFD Recommended disclosures	Summary of our approach	Learn more
<b>The organization's governance around climate-related risks and opportunities.</b>	<p>Sustainability is governed at the highest level at Novozymes by the Board of Directors and the Executive Leadership Team. The Board is responsible for overseeing financial and environmental, social and governance performance as part of the Executive Leadership Team's day-to-day running of the company.</p> <p>The Executive Leadership Team is responsible for delivering on our strategy and targets, which are also guided by climate-related impacts in terms of both opportunities and risks. They are also responsible for managing climate-related impacts affecting Novozymes operations and supply chain.</p>	<p><a href="#">Corporate governance</a></p> <p>CDP climate change – C1.</p> <p><a href="#">Visit</a> </p>
<b>The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.</b>	<p>Climate-related risks and opportunities guide our strategic direction.</p> <p>We are committed to helping the world limit global temperature increases by providing biosolutions that help reduce carbon emissions across industries. In 2022, 76% of our revenue came from biosolutions that contribute towards a climate-neutral society. As part of our strategy, we continue to explore, invest in, and drive innovations in business areas critical for climate change mitigation, such as advanced protein solutions and carbon capture.</p> <p>We also take action to reduce carbon emissions from our own operations and from our supply chain with the goal of achieving net-zero by 2050.</p>	<p><a href="#">Strategy &amp; commitments</a></p> <p><a href="#">Targets &amp; outlook</a></p> <p>CDP climate change – C2, C3.</p> <p><a href="#">Visit</a> </p>
<b>The organization identifies, assesses, and manages climate-related risks.</b>	<p>Climate-related events, such as extreme weather, are important factors when we consider the risks to our business. We address climate-related risks in a structured way through our Enterprise Risk Management process. Both short- and long-term risks are identified, assessed, reported on, and mitigated at different levels of the organization.</p> <p>We consider all key climate-related risks, such as physical risks (weather conditions or flooding) or market risks (ethanol consumption for transportation).</p> <p>Climate change can impact our business for the long term. We closely monitor and address climate risks, currently with the focus on water scarcity.</p>	<p><a href="#">Risk management</a></p> <p>CDP climate change – C2.</p> <p><a href="#">Visit</a> </p>
<b>The metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</b>	<p>Novozymes is committed to the Science Based Targets initiative and to drive action on our decarbonization journey. In 2022, our 2050 net-zero target was validated by the Science Based Targets initiative. We have defined key actions to reach these targets, such as sourcing 100% renewable electricity by 2025.</p>	<p><a href="#">Targets &amp; outlook</a></p> <p><a href="#">Net-zero journey</a></p> <p>CDP climate change – C4, C6, C7.</p> <p><a href="#">Visit</a> </p>

# EU Taxonomy Regulation reporting

The EU Taxonomy Regulation is a classification system that encompasses a standard set of definitions for sustainable activities. The aim of the Regulation is to help the EU in investing in sustainable activities by requiring companies to report on the part of revenue, capital expenditures (CAPEX) and operational expenditures (OPEX), which are associated with environmentally sustainable economic activities. The defined activities are centered around six environmental objectives (climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems).

For 2022, only the first two objectives - climate change mitigation and climate change adaptation – are in scope for reporting. This means that companies should make an assessment if they have economic activities that can qualify as eligible under the Regulation (“eligible activities”). For the eligible activities, it is required to report on Revenue, CAPEX and OPEX and to make an assessment to identify the alignment to the regulation.

Despite the positive environmental impact of Novozymes’ biosolutions and our focus on minimizing our environmental footprint, Novozymes’ core activities do not fall within the scope of the activities defined in the EU Taxonomy. However, we have screened our non-core activities to identify the extent of any eligible activities.

The EU Taxonomy is still under development and technical annexes on the other four objectives are still to be published. Due to evolving aspect of the Regulation, we expect that reporting will change and evolve over the coming years. Therefore, Novozymes’ will reassess the reporting requirement on an annual basis.

## Revenue

We screened the activities listed in the technical annexes under the Delegated Act 2021/2139 and identified no material eligible revenues. Revenue is defined as revenue included in the consolidated financial statements for the year 2022, see the [Note on Revenue](#).

## Capital expenditures (CAPEX)

We screened the activities listed in the technical annexes under the Delegated Act 2021/2139 and identified 6% eligible capital expenditures. The

Taxonomy-eligible CAPEX includes activities related to renewal of wastewater collection and treatment, and material recovery from non-hazardous waste. Of the eligible activities, none was assessed as Taxonomy-aligned. CAPEX is defined as additions of tangible assets as included in the consolidated financial statements for the year 2022. Please see the Note on [Property, plant and equipment](#).

## Operational expenditures (OPEX)

We screened the activities listed in the technical annexes under the Delegated Act 2021/2139 and identified no material eligible operational expenditures. Operating expenditures as per the EU Taxonomy are defined as in 2022 directly incurred, non-capitalizable cost relating to research and development, building renovations, short term leases, and the repair and maintenance of property, plant and equipment.

2022	Revenue	CAPEX	OPEX
Taxonomy-eligible activities	0%	6%	0%
Taxonomy-non-eligible activities	100%	94%	100%
<b>The taxonomy-eligible activities were assessed to be:</b>			
Taxonomy-aligned activities	n/a	0%	n/a
Taxonomy-non-aligned activities	n/a	100%	n/a

Further information on the EU Taxonomy reporting (e.g., full reporting table) can be found at [Novozymes.com](https://www.novozymes.com)

Visit [↗](#)

# Summary of the Remuneration Report

In 2022, Novozymes delivered a strong organic sales growth of 9% and a solid EBIT margin of 26.0% despite a volatile market environment. Furthermore, we concluded our nonfinancial milestone targets for 2022 with an improvement in the environmental impact of our operations, increased employee engagement, and we enabled our customers to reduce their CO<sub>2</sub> emissions. At the end of the year we announced the proposed combination of Novozymes and Chr. Hansen as another step on our strategic journey and to create a leading global biosolutions partner.

Each year Novozymes issues the Novozymes Remuneration Report as a separate report. The content of the Remuneration Report has been prepared to meet the requirements of section 139b of the Danish Companies Act and holds information and details on the remuneration of the Board of Directors and the Executive Management. The Novozymes Remuneration Report 2022 will be presented for an advisory vote at the Annual Shareholders' Meeting to be held in 2023. The Novozymes Remuneration Report 2021 was approved at the Annual Shareholders' Meeting in March 2022 without any comments.

All remuneration of the Board of Directors and the Executive Management in 2022 has been in line with the scope of the approved remuneration policy.

The following is a summary of the Novozymes Remuneration Report 2022.

## General remuneration policy

Novozyymes' remuneration policy for managers and other employees is designed to both encourage strong individual performance and support Novozymes' overall value creation. Remuneration consists of a base salary, pension contributions, a

cash bonus and stock-based incentive programs. These components are linked to employees' individual performance and to the level of achievement of Novozymes' financial, social and environmental targets. The remuneration policy aims to provide managers and other employees with a competitive financial package, which we review regularly against external benchmarks.

## Remuneration of the Board of Directors

The remuneration of the Board of Directors comprises a fixed fee and is not incentive-based. This ensures that the Board of Directors safeguards the company's long-term interests without taking into consideration what these may mean in terms of the value of incentive-based remuneration. The Board of Directors' fee is set at a market-conformant level that reflects the competencies and efforts required of the role, given the complexity of the Novozymes Group, the scope of the work, and the number of Board meetings held.

The fixed base fee was raised from DKK 510,000 to DKK 522,000 in 2022, which corresponds to a 2.3% increase. The Chair receives a fee that is three times the base fee, and the Vice Chair a fee that is two times the base fee.

For committee work, the committee Chair and other committee members receive a further base fee and half a base fee respectively. However, the Chair and the Vice Chair of the Board do not receive such additional fee if appointed to the Nomination and Remuneration Committee.



The Board of Directors consists of 11 members, seven of whom are shareholder-elected members, while four are employee-elected. The total remuneration paid to the Board of Directors in 2022 amounted to DKK 10.2 million compared to DKK 9.8 million in 2021. The increase is a result of the increase in the fixed base fee. Despite significant extra workload and responsibilities related to the proposed combination with Chr. Hansen, the Board does not recommend any additional pay or fee to the Board of Directors.

The individual board members' fees and their shareholdings can be found in the Novozymes Remuneration Report 2022.

[Visit](#) 

### Remuneration of the Executive Management

As per 31 December 2022, the Executive Management of Novozymes A/S consisted of:

- Ester Baiget, President & Chief Executive Officer (CEO)
- Lars Green, Executive Vice President & Chief Financial Officer (CFO)

The total remuneration to members of the Executive Management comprises:

- A base salary plus pension, company car and certain other benefits
- A short-term incentive program (cash bonus) - STIP

- A long-term incentive program (stock-based program) - LTIP

In April 2022, the members of the Executive Management received a 2.5% increase in their base salary. In addition, Ester Baiget received an extraordinary salary increase of 20% in August in recognition of her performance as a leader, the results achieved, and to maintain a market competitive salary.

Ester Baiget and Lars Green will in addition to their regular remuneration receive compensation for lost incentives from their previous employers.

The compensation is subject to certain conditions. Over the period 2020-2023, Ester Baiget may receive up to a total of DKK 9.6 million in extraordinary sign-on compensation for lost incentives from her previous employer, of which DKK 2.7 million was paid out in 2022 and DKK 5.5 million was paid out in the previous years. Over the period 2020-2023, Lars Green may receive up to a total of DKK 14.5 million in extraordinary sign-on compensation for lost incentives from his previous employer, of which DKK 5.7 million was paid out in 2022 and DKK 5.0 million was paid out in the previous years.

The targets for the short-term incentive program (STIP) are typically set by the Board of Directors in connection with the review of the business plan for the year. Good performance will result in target payout (65%) while maximum payout is only achieved for delivering an extraordinary performance. Maximum payout equals 9.5 months' salary.

In 2022, the targets for the STIP were split on the financial performance of the company at 60% weight (sales 40% weight and EBIT margin 20% weight), and a target for strategy contribution at 10% weight. Individual performance targets are set for each executive accounting for the remaining 30%.

The strong sales performance of Novozymes in 2022 exceeded the target and led to a payout of 100%. The EBIT margin achieved in 2022 met the target and resulted in a payout of 65%. The level of achievement of the contribution to strategy was 82.5% based on an assessment of progress on the company's must-win battles.

The level of achievement of individual performance targets, and thus the size of remuneration payment to the individual executive, is determined by the Board of Directors based on recommendations from the Nomination and Remuneration Committee.

Based on its assessment, the Board determined that the pay-out based on individual targets are 100% for Ester Baiget and 90% for Lars Green.

Board member	Audit Committee member	Nomination and Remuneration Committee member	Innovation Committee member	Board meetings attended %
Jørgen Buhl Rasmussen <sup>1,2</sup>	●	● (Chair)		100
Cees de Jong <sup>1,2</sup>	●	●		100
Heine Dalsgaard <sup>1</sup>	● (Chair)			100
Sharon James <sup>1,2</sup>			● (Chair)	100
Kasim Kutay <sup>1</sup>		●		89
Kim Stratton <sup>1,2</sup>		●	●	100
Morten Otto Alexander Sommer <sup>1,2,5</sup>			●	83
Mathias Uhlén <sup>1,4</sup>				50
Anders Hentze Knudsen <sup>3</sup>				100
Anne Breum <sup>3</sup>				93
Preben Nielsen <sup>3</sup>			●	100
Jens Øbro <sup>3</sup>				100

1. Elected at the Shareholders' Meeting 2. Independent 3. Employee representative 4. Resigned from the Board on March 16, 2022 5. New member of the Board from March 16, 2022



## Remuneration to the individual members of the Executive Management

DKK million	Fixed				Variable			2022	Compensation for lost incentives	2021
	Salary	Contribution based pension	Other benefits	Total fixed (% of total remuneration)	Cash bonus (STIP)	Incentive programs (LTIP)	Total variable (% of total remuneration)	Total remuneration		Total remuneration
Ester Baiget, CEO	8.5	0.9	0.4	9.8 (41%)	6.1	7.8	13.9 (59%)	23.7	2.7	22.2
Lars Green, CFO	6.1	0.7	0.2	7.0 (39%)	4.7	6.2	10.9 (61%)	17.9	5.7	17.3
<b>Former executives</b>										
Thomas Videbæk (to 30/04-2021)	-	-	-	-	-	-	-	-	-	3.6
<b>Remuneration</b>	<b>14.6</b>	<b>1.6</b>	<b>0.6</b>	<b>16.8</b>	<b>10.8</b>	<b>14.0</b>	<b>24.8</b>	<b>41.6</b>	<b>8.4</b>	<b>43.1</b>

The difference in the total remuneration to the Executive Management in the above table compared to Note 6.1 – Management Remuneration in the Annual Report is related to long-term incentives. The disclosure in Note 6.1 is based on IFRS recognition principles, whereas the long-term incentive programs are expensed over the four-year vesting period. The long-term incentive included in the above table is the cost of the 2022 program measured at market value at the grant date.

## Short-term incentive program – Target achievement

Weight	Target	% / (index)	Ester Baiget	Lars Green
40%	Sales		100 (154)	100 (154)
20%	EBIT margin	% of maximum /	65 (100)	65 (100)
10%	Contribution to strategy	(index compared to target	82.5 (127)	82.5 (127)
30%	Individual targets	performance)	100 (154)	90 (138)
		<b>Total, % of max</b>	<b>91 (140)</b>	<b>88 (136)</b>
		<b>Total, DKK million</b>	<b>5.7</b>	<b>4.3</b>

In addition to the STIP, Ester Baiget and Lars Green both received a one-off bonus of DKK 400,000 in acknowledgement of their leadership and contributions to Novozymes.



Since 2020, the Board of Directors has issued annual long-term incentive program (LTIP) grants with overlapping three-year performance periods. This allows the Board of Directors to reassess targets for each annual grant cycle to ensure the targets are sufficiently demanding, incentivizing and aligned with the strategy.

The new LTIP for the Executive Management covering the performance period 2022–2024 took effect in 2022. The LTIP consists of 50% shares

and 50% share options, similar to the LTIP 2021. The targets of LTIP 2022 reflects 40% weight on organic sales growth, 20% weight on EBIT margin, 20% weight on ROIC, and 20% weight on non-financial targets. Compared to the LTIP in previous years, the EBIT and ROIC performance have been included in the targets, while economic profit generation has been excluded. Nonfinancial targets are set on four parameters covering environmental and social perspectives: Climate, water, circular, workplace and diversity.

The annual LTIP cannot exceed 19 months' base salary. Further, the program includes a maximum-value clause allowing the Board of Directors to choose to limit the total allocation of stock options and stock if the intrinsic value exceeds twice the annual conditional grant.

The LTIP program covering the performance period 2020–2022 was finally allocated in 2022. As described in the Novozymes Remuneration Report 2021, the targets for sales growth and economic profit have been adjusted to exclude the 2020 performance due to the extraordinary impact of COVID-19, and the allocations related to these targets have been reduced by one third. Average organic sales growth during the two-year period (2021–2022) was 7.5%, resulting in 100% of the target being met (26.5% of the total program). The accumulated economic profit generated in the two-year period resulted in 100% of the economic profit pool (26.5% of the total program) being awarded. 80% of the nonfinancial targets were reached (20% of the total program). In total 69% of the max allocation is being awarded.

For the Executive Management this means that a total of 19,693 shares will be released in January 2023. The number of stock options granted for the three-year period is 143,605 reflecting the realized target achievement.

The members of the Executive Management have contracts of employment containing standard conditions for executive officers of Danish listed

companies, including the periods of notice that both parties are required to give and noncompetition clauses. If an executive officer's contract of employment is terminated by the company without any misconduct on the part of the executive officer, the executive officer has a notice period of 12 months. In addition to the notice period, the executive officer has a right to termination compensation of 12 months' base salary and pension contributions.

Further details on the Executive Management's remuneration and their shareholdings etc. can be found in the Novozymes Remuneration Report 2022.

#### Remuneration of senior leadership

The remuneration of Novozymes' senior leadership (206 vice presidents and directors) is consistent with the general remuneration policy. Incentive programs for vice presidents and directors have been established for the 2022–2024 period. The programs follow the same mechanisms as the program for the Executive Management. The realized target achievement for the LTIP program covering the period 2020–2022 is the same as for the Executive Management and thus 69% of the program is being awarded.

Further information on the incentive programs for these employee groups can be found in Note on [Stock-based payment](#) to the consolidated financial statements, which also includes an overview of outstanding stock options.

# The Novozymes stock

Novozyymes total market cap was DKK 98.9 billion at the end of 2022. The average daily trading volume of the stock (NZYM B) was 382,596 shares or DKK 162 million, making it the 12th most actively traded company on Nasdaq Copenhagen. Novozymes repurchased shares worth DKK 0.5 billion during the year, completing the 2022 stock buyback program. A dividend of DKK 6.00 per share has been proposed.

## Stock performance

Novozyymes total market cap was DKK 98.9 billion at the end of 2022 as the share price (NZYM B) decreased by 34% from the closing price of DKK 537.2 at the end of 2021 to DKK 351.9 at the end of 2022. The share price performance together with

the dividend payment of DKK 1.5 billion resulted in a total shareholder return of -34% for the year.

## Stock buyback program

Novozyymes repurchased 1,134,982 shares during the period from February 21 to June 24, as part of

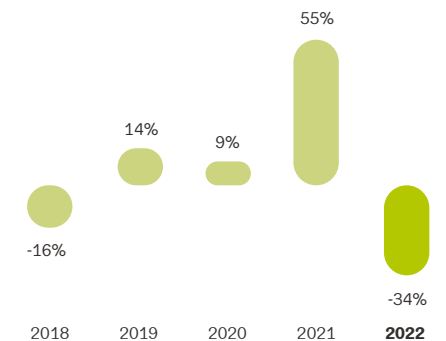
the DKK 0.5 billion stock buyback program for 2022. The repurchased shares were added to the treasury stock. Novozymes held 4,401,011 treasury shares, or 1.6% of the total stock capital, at the end of 2022.

## Dividends

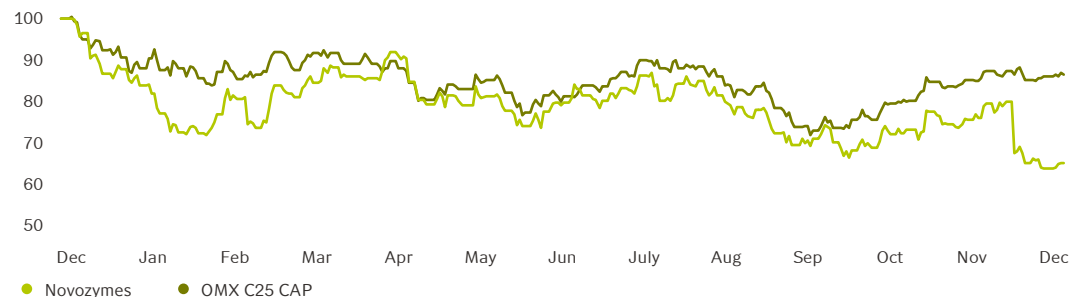
The Board of Directors proposes that the Annual Shareholders' Meeting approve a dividend of DKK 6.00 per share for a total payout of approximately DKK 1,660 million for the 2022 financial year. The proposed dividend corresponds to a payout ratio of 45.0%, which would be a decrease from 48.5% in 2021. Adjusted for non-recurring items with no cash flow impact related to 21<sup>st</sup>.BIO and Microbiome Labs earnout, the payout ratio is 50.9%

If approved, the 2022 dividend will be disbursed on March 7, 2023, with March 2, 2023, as the last trading day with dividend for 2022.

## Total shareholder return including dividends %



## Share price development 2022



The common stock consists of 281,000,000 shares each with a nominal value of DKK 2 per share. The common stock is divided into 53,743,600 A shares that carry 20 votes each and 227,256,400 B shares that carry 2 votes each.

Novozymes had more than 60,000 shareholders at the end of 2022, and 76% of the B shares were held outside Denmark, mainly by institutional investors. Fifty institutional investors, including Novo Holdings A/S, held approximately 60% of the B shares. Novo Holdings A/S held 25.6% of the total common stock in Novozymes and controlled 72.7% of the votes.

Novo Holdings A/S is wholly owned by the Novo Nordisk Foundation, an independent Danish foundation with corporate interests.

The Novo Nordisk Foundation has the objectives to provide a stable basis for the commercial and research activities of the companies in the Novo Group, and to support scientific, humanitarian and social causes.

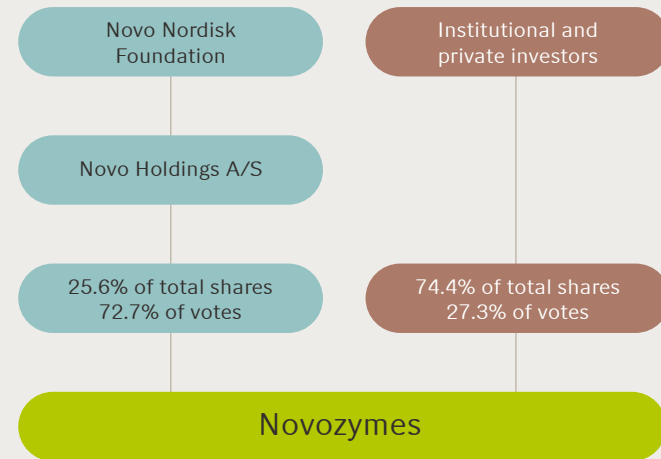
#### Ownership by geography (B shares)

- Denmark **24%**
- UK & Ireland **13%**
- Rest of Europe **24%**
- North America **32%**
- Rest of world **7%**



	A stock	B stock	Total
Share capital (DKK)	107,487,200	454,512,800	562,000,000
Number of shares	53,743,600	227,256,400	281,000,000
Held by Novo Holdings A/S (%)	100%	8.0%	25.6%
Number of votes	1,074,872,000	454,512,800	1,529,384,800
Voting rights (%)	70.3%	29.7%	100%
Held by Novo Holdings A/S (%)	70.3%	2.4%	72.7%

#### Ownership structure



Novozymes and Chr. Hansen announced on Dec. 12, 2022, the proposed combination of the two companies to create a leading global biosolutions partner with a broad biological toolbox and a diversified portfolio across markets.

Click to learn more about the proposed combination.

[Visit](#)

# Accounts and performance

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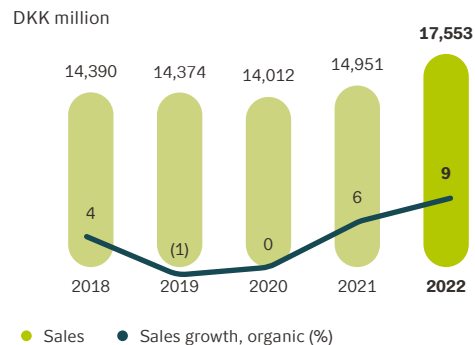
# Sales and earnings

## Sales

Total sales in 2022 were DKK 17,553 million, corresponding to an increase of 9% organically and of 17% reported in DKK compared with 2021.

The geopolitical and macroeconomic situation in 2022 impacted consumer behavior and supply chains, and affected industries in different ways. In 2022, Household Care was impacted by the war in Ukraine as well as volume softness in Europe. Food, Beverages & Human Health delivered double-digit growth supported by customers' focus on raw material optimization. Bioenergy's strong double-digit sales growth was driven by innovation and supported by expansion of corn-based ethanol production in Latin

## Sales and sales growth



America and growth in solutions for biodiesel production. Solid growth in Grain & Tech Processing was supported by favorable market conditions. Agriculture, Animal Health & Nutrition delivered solid performance driven by demand for yield-enhancing solutions.

## Gross profit and margin

Gross profit increased by 11% to DKK 9,577 million from DKK 8,623 million in 2021. The gross margin was 54.6%, down from 57.7% in 2021. The decrease was mainly due to higher input, energy and logistics costs, partly offset by productivity improvements and operating leverage and a positive impact from pricing and currencies.

## Operating costs

Operating costs increased by 9% to DKK 5,224 million. Operating costs as a percentage of sales were 30%.

- Sales and distribution costs increased by 17%, accounting for 13% of sales.
- Research and development costs were flat, accounting for 11% of sales.
- Administrative costs increased by 11%, accounting for 5% of sales.

The increase in operating costs in 2022 was mainly due to increased commercial activities, higher logistics costs, higher administrative costs and currencies.

## Other operating income

Other operating income was DKK 276 million, compared with DKK 188 million in 2021. Other operating income in 2022 was positively impacted by DKK 201 million from the non-cash accounting gain related to the 21<sup>st</sup>.BIO transaction.

## Special items and EBIT before special items

EBIT before special items was DKK 4,629 million for 2022 corresponding to a margin of 26.4%. Special items amounted to DKK 68 million, consisting entirely of transaction costs related to the proposed combination of Novozymes and Chr. Hansen.

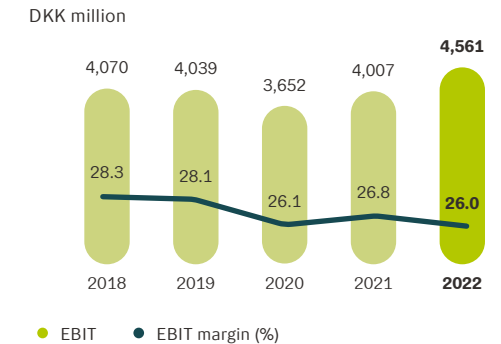
## EBIT and EBIT margin

EBIT increased by 14% to DKK 4,561 million, up from DKK 4,007 million in 2021. The EBIT margin ended at 26.0%, down from 26.8% in 2021. Adjusted for the non-cash gain from the 21<sup>st</sup>.BIO transaction and special items, the EBIT margin in 2022 was 25.2%.

## Net finance

Net financial income was DKK 2 million in 2022, compared to net financial costs of DKK 79 million in 2021. In 2022 a net loss of DKK 330 million on currency hedging/revaluation and other foreign

## EBIT and EBIT margin



exchange losses was realized. This was more than offset by the gain from the divestment of Albumedix of DKK 267 million and a fair value adjustment of the contingent consideration related to Microbiome Labs of DKK 223 million. Financial costs also include costs for the refinancing facility related to the proposed combination.

## Tax

The effective tax rate was 19.1%, down from 19.9% in 2021. The tax rate was positively impacted by 3.3% because non-recurring gains were tax-exempt.

## Earnings per share (diluted)

Earnings per share (diluted) were DKK 13.19, compared with DKK 11.23 in 2021.

# Consolidated statements of income

## Income statement

DKK million	Note	2022	2021
Revenue	2.1, 2.2	17,553	14,951
Cost of goods sold	2.3, 3.1, 3.2, 4.1	(7,976)	(6,328)
<b>Gross profit</b>		<b>9,577</b>	<b>8,623</b>
Sales and distribution costs	2.3, 3.1, 3.2	(2,271)	(1,936)
Research and development costs	2.3, 2.4, 3.1, 3.2	(2,001)	(2,009)
Administrative costs	2.3, 3.1, 3.2	(952)	(859)
Other operating income, net	2.5	276	188
<b>Operating profit (EBIT) before special items</b>		<b>4,629</b>	<b>4,007</b>
Special items	2.6	(68)	-
<b>Operating profit (EBIT)</b>		<b>4,561</b>	<b>4,007</b>
Share of result in associates		(7)	(4)
Financial income	5.2	533	174
Financial costs	5.2	(531)	(253)
<b>Profit before tax</b>		<b>4,556</b>	<b>3,924</b>
Tax	2.7	(870)	(779)
<b>Net profit</b>		<b>3,686</b>	<b>3,145</b>
<b>Attributable to</b>			
Shareholders of Novozymes A/S		3,676	3,146
Non-controlling interests		10	(1)
		<b>3,686</b>	<b>3,145</b>
Proposed dividend per share, DKK		6.00	5.50
Earnings per share, DKK	2.8	13.29	11.32
Earnings per share, diluted, DKK	2.8	13.19	11.23

## Statement of comprehensive income

DKK million	Note	2022	2021
<b>Net profit</b>		<b>3,686</b>	<b>3,145</b>
Items that may subsequently be reclassified to the income statement:			
<b>Currency translation adjustments</b>			
Subsidiaries and non-controlling interests		155	723
Tax on currency translation adjustments		(15)	(2)
<b>Currency translation adjustments</b>		<b>140</b>	<b>721</b>
<b>Cash flow hedges</b>			
Fair value adjustments		(150)	(173)
Tax on fair value adjustments		33	38
Cash flow hedges reclassified to financial costs		295	(31)
Tax on reclassified fair value adjustments		(65)	7
<b>Cash flow hedges</b>		<b>113</b>	<b>(159)</b>
<b>Other comprehensive income</b>		<b>253</b>	<b>562</b>
<b>Comprehensive income</b>		<b>3,939</b>	<b>3,707</b>
<b>Attributable to</b>			
Shareholders of Novozymes A/S		3,929	3,706
Non-controlling interests		10	1
		<b>3,939</b>	<b>3,707</b>

# Cash Flow

## Cash flow from operating activities

The cash flow from operating activities was DKK 4,006 million, down from DKK 4,062 million in 2021. The lower cash flow from operating activities was mainly due to higher tax, interest etc. paid, and lower reversals of non-cash items partly offset by higher net profit.

## Net investments

Net investments excluding acquisitions were DKK 2,862 million, up from DKK 1,116 million in 2021. Net investments in property, plant and equipment amounted to DKK 2,732 million, compared with DKK 947 million in 2021, mainly due to the

investment in the new production line in Blair, Nebraska, U.S.

## Free cash flow before acquisitions and divestments

The free cash flow before acquisitions and divestments amounted to DKK 1,144 million, compared with DKK 2,946 million in 2021. The decrease was mainly driven by the increase in net investments and higher taxes paid.

## Free cash flow

The free cash flow was DKK 1,334 million in 2022, compared with DKK 1,315 million in 2021.

## Financing activities

The cash flow from financing activities was negative at DKK 1,250 million, compared with a negative cash flow of DKK 1,586 million in 2021. The negative cash flow from financing activities was mainly due to the 2022 stock buyback program of DKK 500 million and dividend payments of DKK 1,525 million, partly offset by net borrowings.

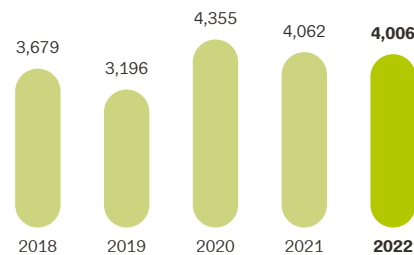
## Cash position

Cash and cash equivalents at December 31, 2022, amounted to DKK 1,041 million, up from DKK 963 million at December 31, 2021. Undrawn committed credit facilities were DKK 17,502

million at December 31, 2022, which includes a significant refinancing facility related to the proposed combination of Novozymes and Chr. Hansen.

## Cash flow from operating activities

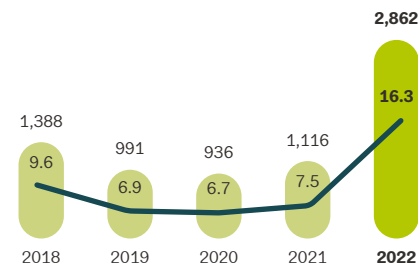
DKK million



\* The comparatives for 2018 have not been restated for IFRS 16

## Net investments

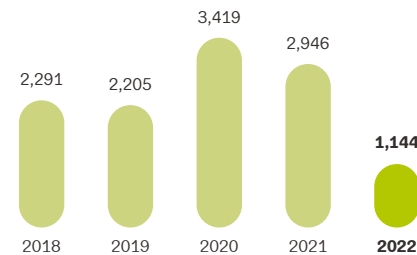
DKK million



● Net investments ● Net investments (% of sales)

## Free cash flow before acquisitions

DKK million



# Consolidated statement of cash flows

DKK million	Note	2022	2021
<b>Net profit</b>		<b>3,686</b>	<b>3,145</b>
Reversal of non-cash items	6.7	1,935	2,198
Income tax paid	2.7	(910)	(627)
Interest received		18	18
Interest etc. paid		(131)	(52)
<b>Cash flow before change in working capital</b>		<b>4,598</b>	<b>4,682</b>
<b>Change in working capital</b>			
(Increase)/decrease in receivables		(330)	(574)
(Increase)/decrease in inventories		(787)	(556)
Increase/(decrease) in payables, deferred income and contract liabilities		534	518
Currency translation adjustments		(9)	(8)
<b>Cash flow from operating activities</b>		<b>4,006</b>	<b>4,062</b>
<b>Investments</b>			
Purchase of intangible assets	6.7	(130)	(169)
Purchase of property, plant and equipment	6.7	(2,760)	(1,071)
Sale of property, plant and equipment		28	124
Business acquisitions, divestments, purchase and sale of financial assets	6.7	190	(1,631)
<b>Cash flow from investing activities</b>		<b>(2,672)</b>	<b>(2,747)</b>
<b>Free cash flow</b>		<b>1,334</b>	<b>1,315</b>

DKK million	Note	2022	2021
<b>Financing</b>			
Borrowings		2,140	2,144
Repayment of borrowings		(1,602)	(1,283)
Overdraft facilities, net		193	313
Repayment of lease liabilities		(120)	(103)
Shareholders:			
Purchase of treasury stock		(500)	(1,500)
Sale of treasury stock		164	309
Dividend paid		(1,525)	(1,466)
<b>Cash flow from financing activities</b>		<b>(1,250)</b>	<b>(1,586)</b>
<b>Net cash flow</b>		<b>84</b>	<b>(271)</b>
Unrealized gain/(loss) on currencies and financial assets included in cash and cash equivalents		(6)	53
<b>Net change in cash and cash equivalents</b>		<b>78</b>	<b>(218)</b>
Cash and cash equivalents at January 1		963	1,181
<b>Cash and cash equivalents at December 31</b>		<b>1,041</b>	<b>963</b>

# Balance sheet and financial position

## Total assets

Total assets increased from DKK 24,767 million at December 31, 2021, to DKK 27,983 million at December 31, 2022. The increase was mainly driven by net investments, an increase in net working capital, partly offset by amortization and depreciation.

## Invested capital

Invested capital increased from DKK 18,118 million in 2021 to DKK 20,703 million in 2022. This was mainly a result of an increase in net investments.

## ROIC and ROIC before special items

Return on invested capital (ROIC), including goodwill, was 17.6%, down 1.7 percentage points from 19.3% in 2021. ROIC before special items was 17.9%. The decrease in ROIC was mainly due to the increase in invested capital.

## Net working capital

Novozymes' net working capital increased to DKK 4,244 million, up from DKK 3,535 million in 2021, due to an increase in inventories and trade receivables, partly offset by higher other payables.

## Net interest-bearing debt

Novozymes had net interest-bearing debt of DKK 5,807 million at December 31, 2022, compared with DKK 5,225 million at December 31, 2021.

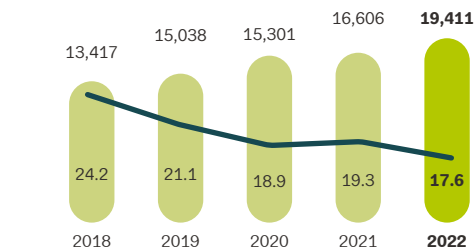
Net interest-bearing debt was impacted by cash outflows from stock buybacks of DKK 500 million, dividend payments of DKK 1,525 million and the investment in the new production line in Blair, Nebraska, U.S.

## Net interest-bearing debt-to-EBITDA

Net interest-bearing debt-to-EBITDA was 1.0x at December 31, 2022, unchanged from 1.0x at December 31, 2021.

## ROIC and average invested capital

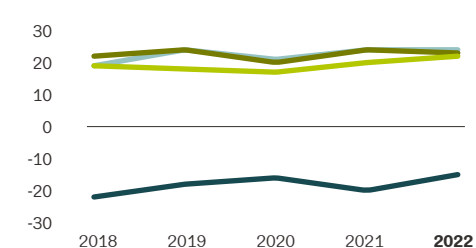
DKK million



● Average invested capital ● ROIC (%)

## Net working capital

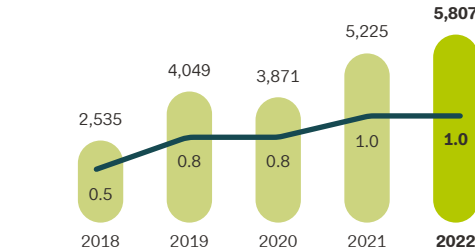
% of sales



● Inventories ● Receivables ● Net working capital ● Payables and deferred income

## Net interest-bearing debt (NIBD) and net interest-bearing debt-to-EBITDA

DKK million



● NIBD ● NIBD/EBITDA



# Consolidated balance sheet

## Assets

DKK million	Note	Dec. 31, 2022	Dec. 31, 2021
Intangible assets	3.1	4,698	5,024
Land and buildings	3.2	3,999	3,980
Plant and machinery	3.2	4,151	4,290
Other equipment	3.2	1,028	1,039
Assets under construction	3.2	2,896	876
Deferred tax assets	2.7	1,623	1,637
Other financial assets		92	30
Investments in associates		223	29
Other receivables	4.3	32	39
<b>Non-current assets</b>		<b>18,742</b>	<b>16,944</b>
Inventories	4.1	3,803	2,992
Trade receivables	4.2	3,454	2,948
Contract assets	4.2	151	40
Tax receivables	2.7	352	286
Other receivables	4.3	360	519
Other financial assets		80	75
Cash and cash equivalents		1,041	963
<b>Current assets</b>		<b>9,241</b>	<b>7,823</b>
<b>Assets</b>		<b>27,983</b>	<b>24,767</b>

## Liabilities and equity

DKK million	Note	Dec. 31, 2022	Dec. 31, 2021
Common stock	5.5	562	564
Reserves and retained earnings		13,275	11,263
<b>Equity attributable to shareholders of Novozymes A/S</b>		<b>13,837</b>	<b>11,827</b>
Non-controlling interests	6.5	391	379
<b>Total equity</b>		<b>14,228</b>	<b>12,206</b>
Share purchase liability	6.5	760	717
Deferred tax liabilities	2.7	1,653	1,337
Provisions	3.4	119	153
Contingent consideration	3.6	224	543
Lease liabilities		288	360
Deferred income		129	98
Other financial liabilities	5.3	3,619	3,680
<b>Non-current liabilities</b>		<b>6,792</b>	<b>6,888</b>
Lease liabilities		123	122
Provisions	3.4	10	21
Contingent consideration	3.6	158	-
Other financial liabilities	5.3	2,919	2,139
Trade payables		1,869	1,490
Contract liabilities		94	129
Deferred income		44	34
Tax payables	2.7	326	486
Other liabilities	4.4	1,420	1,252
<b>Current liabilities</b>		<b>6,963</b>	<b>5,673</b>
<b>Liabilities</b>		<b>13,755</b>	<b>12,561</b>
<b>Liabilities and equity</b>		<b>27,983</b>	<b>24,767</b>

# Equity and shareholder return

## Equity

At December 31, 2022, equity was DKK 14,228 million, up from DKK 12,206 million at December 31, 2021, as comprehensive income more than offset dividend payments and net stock buybacks in 2022.

## Equity ratio

Equity accounted for 50.8% of total assets at December 31, 2022, up from 49.3% at December 31, 2021.

## Return on equity

Return on equity was 28.6%, up 1.3 percentage points from 27.3% in 2021. The increase was a result of the higher net profit.

## Treasury stock

At December 31, 2022, the holding of treasury stock was 4.4 million B shares, equivalent to 1.6% of the common stock, compared to 4.9 million B shares, equivalent to 1.6% of the common stock in 2021.

## Dividend

The Board of Directors proposes that the Annual Shareholders' Meeting approve a dividend of DKK 6.00 per share for the 2022 financial year, corresponding to an increase of 9% compared with 2021. This will result in an expected total dividend payment of approximately DKK 1,660 million, corresponding to a payout ratio of 45.0%.

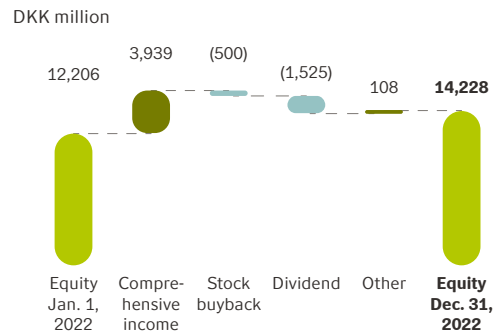
Adjusted for non-recurring items with no cash flow impact related to 21<sup>st</sup>.BIO and the Microbiome Labs earnout, the payout ratio is 50.9%.

## Stock buyback program

In 2022, Novozymes bought back 1.1 million B shares at an aggregate transaction value of DKK 500 million under the stock buyback program initiated on February 21, 2022, and completed on June 27, 2022. The shares acquired under the program will be used to reduce the common stock and to meet obligations arising from employee stock-based incentive programs.

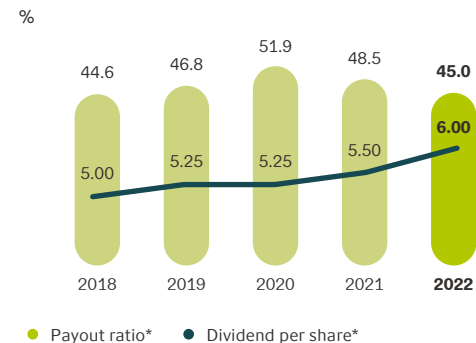
Read more about the Novozymes stock in [The Novozymes stock](#)

## Movements in equity 2022

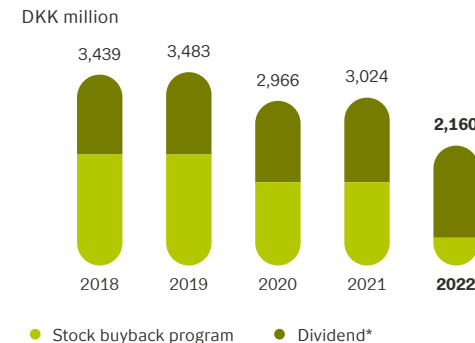


\* Dividend for 2022 is the proposed dividend.

## Payout ratio and dividend per share



## Shareholder return



# Consolidated statement of equity

Attributable to shareholders of Novozymes A/S

DKK million	Common stock	Currency translation adjustments	Cash flow hedges	Retained earnings	Total	Non-controlling interests	Total equity
<b>Equity at January 1, 2022</b>	<b>564</b>	<b>(8)</b>	<b>(32)</b>	<b>11,303</b>	<b>11,827</b>	<b>379</b>	<b>12,206</b>
Net profit for the year				3,676	3,676	10	3,686
Other comprehensive income for the year		140	113		253	-	253
<b>Total comprehensive income for the year</b>		<b>140</b>	<b>113</b>	<b>3,676</b>	<b>3,929</b>	<b>10</b>	<b>3,939</b>
Purchase of treasury stock				(500)	(500)		(500)
Sale of treasury stock				164	164		164
Write-down of common stock	(2)			2	-		-
Dividend				(1,524)	(1,524)	(1)	(1,525)
Stock-based payment				123	123		123
Non-controlling interests and share purchase liability				(43)	(43)	3	(40)
Tax related to equity items				(139)	(139)		(139)
<b>Changes in equity</b>	<b>(2)</b>	<b>140</b>	<b>113</b>	<b>1,759</b>	<b>2,010</b>	<b>12</b>	<b>2,022</b>
<b>Equity at December 31, 2022</b>	<b>562</b>	<b>132</b>	<b>81</b>	<b>13,062</b>	<b>13,837</b>	<b>391</b>	<b>14,228</b>
<b>Equity at January 1, 2021</b>	<b>570</b>	<b>(727)</b>	<b>127</b>	<b>11,263</b>	<b>11,233</b>	<b>11</b>	<b>11,244</b>
Net profit for the year				3,146	3,146	(1)	3,145
Other comprehensive income for the year		719	(159)		560	2	562
<b>Total comprehensive income for the year</b>		<b>719</b>	<b>(159)</b>	<b>3,146</b>	<b>3,706</b>	<b>1</b>	<b>3,707</b>
Purchase of treasury stock				(1,500)	(1,500)		(1,500)
Sale of treasury stock				309	309		309
Write-down of common stock	(6)			6	-		-
Dividend				(1,465)	(1,465)	(1)	(1,466)
Stock-based payment				75	75		75
Non-controlling interests and share purchase liability				(717)	(717)	368	(349)
Tax related to equity items				186	186		186
<b>Changes in equity</b>	<b>(6)</b>	<b>719</b>	<b>(159)</b>	<b>40</b>	<b>594</b>	<b>368</b>	<b>962</b>
<b>Equity at December 31, 2021</b>	<b>564</b>	<b>(8)</b>	<b>(32)</b>	<b>11,303</b>	<b>11,827</b>	<b>379</b>	<b>12,206</b>

The proposed dividend of approximately DKK 1,660 million for 2022 is included in Retained earnings.

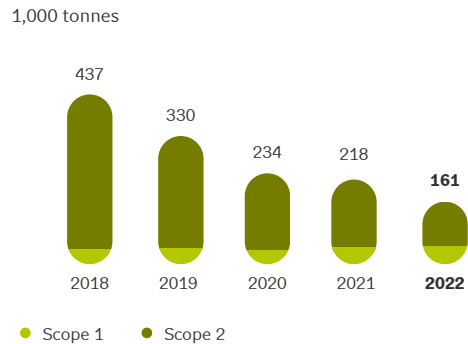
# Environmental performance

## Operational ecoefficiency

In 2022, sales increased organically by 9% which led to increases in production, and in the consumption of energy and water compared to 2021. However the consumption of energy and water only increased by 3% and 2% respectively compared 2021.

Novozymes strives to decouple environmental impact from business growth, and we define targets and metrics that measure and drive our sustainability performance.

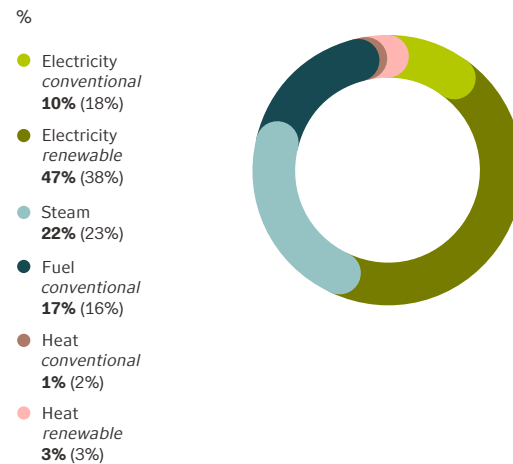
## Five-year operational emissions (CO<sub>2</sub>-eqv.)



## Climate change

Novozymes' total CO<sub>2</sub> emissions were 161,000 tonnes in 2022, a 26% decrease from 218,000 tonnes in 2021. The major contributor was Novozymes' site in Hongda, China for which we procured green electricity during the full year 2022.

## Energy by source 2022 (2021)



## Energy

In 2022, Novozymes' energy consumption was 4,840,000 GJ, an increase of 3% compared with 2021.

Renewable sources accounted for 50% of the energy consumption in 2022 compared with 42% in 2021. Renewable electricity made up 82% of the total in 2022, up from 68% in 2021. As for climate change, the major contributor was the procurement of green electricity for Novozymes' site in Hongda, China.

## Water

Novozymes' water withdrawal increased by 2%, from 8,538,000 m<sup>3</sup> in 2021 to 8,720,000 m<sup>3</sup> in 2022.

The total volume of wastewater generated in 2022 increased by 2% compared to 2021.

## Waste

In 2022, 100% of our biomass was re-circulated as compost, fertilizer, feedstock for biogas or the like, compared to 99% in 2021.

For non-biomass waste, the rate of recycling across our global production sites increased to 63%, from 62% in 2021.

## Environmental compliance

The number of breaches of regulatory limits recorded worldwide in the Novozymes organization increased to 21 in 2022 from 13 in 2021. Most of them were related to wastewater discharge and air emission requirements.

Novozymes is addressing these incidents. Novozymes received 23 neighbor complaints in 2022, compared to seven received in 2021. Most of them pertained to odor cases associated with the treatment of biomass in a newly installed biomass handling system. Mitigation actions are being carried out.

# Consolidated environmental data

	Note		2022	2021
<b>Climate change</b>				
Greenhouse gas emissions (Scope 1 + 2)*	7.1	1,000 tonnes CO <sub>2</sub> -eqv.	161	218
<b>Energy</b>				
Energy consumption	7.2	1,000 GJ	4,840	4,699
Renewable energy	7.2	%	50	42
<b>Water</b>				
Water consumption	7.3	1,000 m3	8,720	8,538
Volume of wastewater	7.3	1,000 m3	6,766	6,610
<b>Waste</b>				
Total waste	7.4	1,000 tonnes	559	481
Recycling rate for non-biomass waste	7.4	%	63	62
Biomass volume	7.4	1,000 tonnes	539	466
Biomass handled in circular set-up (recycled)	7.4	%	100	99
<b>Environmental compliance, etc.</b>				
Breaches of regulatory limits	7.5	No.	21	13
Neighbor complaints	7.5	No.	23	7
<b>References to notes without data</b>				
Bioethics & biodiversity	7.6		n/a	n/a
Product stewardship	7.7		n/a	n/a

\* 2021 is restated due to full implementation of IEA CO<sub>2</sub> emission factors in U.S. and Scope 3 emissions are no longer included in the reported numbers.



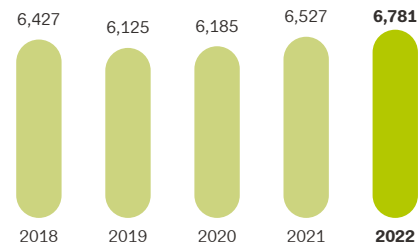
# Social and governance performance

## Labor practices & human rights

At December 31, 2022, the total number of employees was 6,781, compared with 6,537 in 2021.

### Number of employees

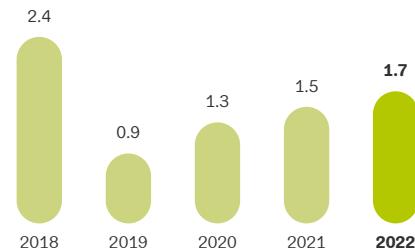
No. of employees



In 2022, the employee absence rate was 2.6% compared to 2.2% in 2021. The effects of the COVID-19 pandemic continued to impact the absence rate, as people were required to stay at home if tested positive.

Novozymes promotes equal opportunities and strengthens diversity in the global workplace. At December 31, 2022, 33% of senior management (directors and higher) were women compared to 34% in 2021.

### Frequency of injuries (per million working hours)



### Occupational health & safety

The frequency of occupational injuries increased to 1.7 per million working hours in 2022, compared with 1.5 per million working hours in 2021, corresponding to an increase in the number of accidents by 3 compared to 2021. Novozymes will continue to drive a safety culture to ensure that safety behaviors are a part of the daily routines in our organization.

## Innovation

Novozymes is committed to delivering bioinnovation and launched 26 new products in 2022. In 2022, Novozymes had 892 active patent families, which comprise the number of inventions that have active patent applications or active patents. The number decreased from 902 in 2021.

### Business ethics

In 2022, Novozymes reinforced our commitment to business integrity. During the year, 97% of Novozymes' employees in scope completed business integrity training. In 2021 the number was 99%.

As in 2021, there were no breaches of competition law in 2022.

### Customer engagement

Novozymes conducts an annual customer satisfaction survey and tracks progress on its Net Promoter Score (NPS), which is assessed on a scale from -100 to +100. In 2022, we received an NPS of +69, which is in line with 2021 and confirms that we continue to have a solid relationship with our customers.

# Consolidated social and governance data

	Note		2022	2021
<b>Labor practices &amp; human rights</b>				
Employees, total	2.3	No.	6,781	6,527
Women	2.3	%	39.2	39.2
Rate of absence	8.1	%	2.6	2.2
<b>Inclusion &amp; Diversity</b>				
Women in senior management	8.2	%	33	34
<b>Employee safety and well-being</b>				
Fatalities		No.	-	-
Frequency of occupational injuries with absence	8.3	Per million working hours	1.7	1.5
Frequency of occupational diseases	8.3	Per million working hours	0.1	0.2
Three-year rolling average of occupational injuries with absence	8.3	Per million working hours	1.5	1.2
<b>Innovation</b>				
New products	2.4	No.	26	14
Active patent families	2.4	No.	892	902
<b>Business ethics</b>				
Completion of business integrity training for employees in scope	8.4	%	97	99
Breaches of competition law	8.4	No.	-	-
<b>Customer engagement</b>				
Customer satisfaction, Net Promoter Score (NPS)	8.5	No.	69	69
<b>Reference to notes without data</b>				
Community engagement	8.6		n/a	n/a
Responsible sourcing	8.7		n/a	n/a

# Notes

## 1 Basis of reporting

- 1.1 Significant changes and events
- 1.2 Basis of reporting

## 2 Net operating profit after tax

- 2.1 Segment
- 2.2 Revenue
- 2.3 Employees
- 2.4 Research and development costs
- 2.5 Other operating income, net
- 2.6 Special items
- 2.7 Tax
- 2.8 Earnings per share

## 3 Invested capital

- 3.1 Intangible assets and impairment test of goodwill

- 3.2 Property, plant and equipment
- 3.3 Leases
- 3.4 Provisions
- 3.5 Business acquisitions
- 3.6 Contingent consideration

## 4 Net working capital

- 4.1 Inventories
- 4.2 Trade receivables and contract assets
- 4.3 Other receivables
- 4.4 Other liabilities

## 5 Capital structure and financing

- 5.1 Financial risk factors and risk management
- 5.2 Financial income and Financial costs

- 5.3 Other financial liabilities
- 5.4 Derivatives – hedge accounting
- 5.5 Common stock and treasury stock
- 5.6 Financial assets and liabilities by category

## 6 Other financial notes

- 6.1 Management remuneration
- 6.2 Stock-based payment
- 6.3 Commitments and contingencies
- 6.4 Related party transactions
- 6.5 Non-controlling interests
- 6.6 Fees to statutory auditors
- 6.7 Cash flow
- 6.8 Events after the reporting date
- 6.9 Group companies

## 7 Environmental data

- 7.1 Climate change
- 7.2 Energy
- 7.3 Water
- 7.4 Waste
- 7.5 Environmental compliance
- 7.6 Bioethics & biodiversity
- 7.7 Product stewardship

## 8 Social and governance data

- 8.1 Labor practices & human rights
- 8.2 Inclusion & diversity
- 8.3 Employee safety & well-being
- 8.4 Business ethics
- 8.5 Customer engagement
- 8.6 Community engagement
- 8.7 Responsible sourcing

Note 1

# Basis of reporting

**1.1** Significant changes and events

**1.2** Basis of reporting

# 1.1 Significant changes and events

In line with the refreshed strategy, “Unlocking growth – powered by biotech”, announced in 2021, the following significant events impacted Accounts and performance in 2022.

## Novozymes and Chr. Hansen to combine and create a leading global biosolutions partner

Novozymes and Chr. Hansen announced on December 12, 2022, the proposed combination of the two companies to create a leading global biosolutions partner.

As a consequence of the proposed combination of Novozymes and Chr. Hansen, special items are presented in the income statement for 2022. Reference is made to Note 2.6 for further information.

See Note 5.1 for information on undrawn committed credit facilities and Note 6.3 on contractual commitments related to the proposed combination.

## War in Ukraine

Novozymes does not have any significant business activities in Russia and Ukraine, and while sales to Russia have been discontinued and the sales office in Russia has been closed, this has not resulted in any significant impairment of assets. Reference is made to Notes 2.2, 3.2 and 4.2 for further details.

The uncertainty regarding energy supply – with Russian gas being cut off – has led to investments in oil-based energy generators to mitigate the gas shortage and secure production stability. See note 7.2 for further information.

Novozymes and our employees have supported refugees and families impacted by the war through multiple initiatives. See note 8.6 for further information.

## Significant transactions

In 2022, Novozymes Biotechnology merged with 21<sup>st</sup>.BIO and a non-cash accounting gain was realized. Following the transaction, Novozymes obtained significant influence in 21<sup>st</sup>.BIO, and 21<sup>st</sup>.BIO is recognized as an associated company of Novozymes. Reference is made to Note 2.5 for further details.

Additionally, Novozymes' minority ownership in Albumedix has been divested, leading to a financial gain. Reference is made to Note 5.2 for more details.



## 1.2 Basis of reporting

This section provides an overview of Novozymes' principal accounting policies, the critical accounting estimates and judgments applied, a definition of materiality as well as the impact of new or amended IFRS standards and interpretations.

The symbols **I/S**, **B/S** and **ESG** show which amounts in the notes can be found in the income statement, the balance sheet, and in environmental data and social and governance data respectively.

The accounting policies described below apply to the consolidated financial statements as a whole. Accounting policies and critical accounting estimates and judgments are described in the notes to which they relate to enhance understanding. The descriptions of accounting policies in the notes form part of the overall description of accounting policies.

### ACCOUNTING POLICIES

#### Consolidation

The consolidated financial statements comprise the financial statements of Novozymes A/S (the Parent Company) and subsidiaries controlled by Novozymes A/S, prepared in accordance with

Group accounting policies. The consolidated financial statements are prepared by combining items of a uniform nature and subsequently eliminating intercompany transactions, internal stockholdings and balances, and unrealized intercompany profits and losses.

Non-controlling interests' share of subsidiaries' net profit for the year and equity are included in the Group's net profit and total equity, but are disclosed separately.

Consolidation of the environmental, social and governance data follows the same principles as the financial reporting.

#### Translation of foreign currencies

The consolidated financial statements are presented in Danish kroner (DKK), which is also the functional and presentation currency of the parent company.

Exchange rate differences arising between exchange rates at the transaction date and the reporting date are recognized as Financial income or Financial costs.

Foreign currency transactions are translated into the functional currency defined for each company using the exchange rates prevailing at the transaction date. Monetary items denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the reporting date.

Financial statements of foreign subsidiaries are translated into DKK at the exchange rates prevailing at the reporting date for assets and liabilities, and at average exchange rates for income statement items.

The following exchange rate differences, arising from translation using the exchange rate prevailing at the reporting date, are recognized in Other comprehensive income:

- Translation of foreign subsidiaries' net assets at the beginning of the year.
- Translation of foreign subsidiaries' income statements from average exchange rates.

#### iXBRL reporting

Novozymes is required to file its annual report in the European Single Electronic Format ('ESEF') and The Novozymes Report is therefore prepared

in the XHTML format that can be displayed in a standard browser. The primary statements and notes in the consolidated financial statements are tagged using inline eXtensible Business Reporting Language (iXBRL). The iXBRL tags comply with the ESEF taxonomy, which is included in the ESEF Regulation and developed based on the IFRS taxonomy published by the IFRS Foundation. Where a financial statement line item or note disclosure is not defined in the ESEF taxonomy, an extension to the taxonomy has been created. Extensions are anchored to elements in the ESEF taxonomy, except for extensions which are subtotals.

The Novozymes Report submitted to the Danish Financial Supervisory Authority consists of the XHTML document together with certain technical files, all included in a file named NOVOZYMES-2022-12-31-en.zip.

## 1.2 Basis of reporting (continued)

### Non-IFRS financial measures

Novozymes uses certain financial measures that are not defined in IFRS to describe the Group's financial performance, financial position and cash flows. These financial measures may therefore be defined and calculated differently from similar measures in other companies, and may thus not be comparable.

The non-IFRS financial measures presented in The Novozymes Report are:

- Organic sales growth
- Special items
- Operating profit (EBIT) before special items
- Operating costs
- Economic profit
- ROIC
- ROIC before special items
- Free cash flow before acquisitions

Definitions of non-IFRS financial measures are provided in the Glossary section of The Novozymes Report.

ROIC is the adjusted operating profit (NOPAT) after tax for the last 12 months as a percentage of average invested capital.

### Calculation of ROIC

DKK million	Note	2022	2021
<b>Operating profit (EBIT)</b>		<b>4,561</b>	<b>4,007</b>
Exchange gains/(losses)		(330)	(4)
Tax on adjusted operating profit	3.1, 3.2	(808)	(795)
Share of loss in associates		(7)	(4)
<b>Adjusted operating profit (NOPAT)</b>		<b>3,416</b>	<b>3,204</b>
DKK million	Note	2022	2021
Intangible assets	3.1	4,698	5,024
Property, plant and equipment	3.2	12,074	10,185
Investments in associates		223	29
Net working capital*		4,244	3,535
Financial assets, non-interest-bearing		80	75
Provisions	3.4	(129)	(174)
Contingent consideration	3.6	(382)	(543)
Derivatives		(101)	(113)
Tax, net		(4)	100
<b>Invested capital</b>		<b>20,703</b>	<b>18,118</b>
<b>Average invested capital</b>		<b>19,411</b>	<b>16,606</b>
<b>ROIC</b>		<b>17.6%</b>	<b>19.3%</b>

\* Net working capital includes Inventories, Trade receivables, Contract assets, Other receivables, Assets held for sale, Deferred income, Trade payables, Contract liabilities and Other liabilities.

## 1.2 Basis of reporting (continued)

### Critical accounting estimates and judgments

The preparation of the consolidated financial statements and the environmental, social and governance data requires Management to make estimates and assumptions that can have a significant effect on the application of policies and reported amounts of assets, liabilities, income, expenses and related disclosures. The estimates and underlying assumptions are based on historical experience and various other factors. Actual results may differ from these estimates.

The application of the Group's accounting policies may require Management to make judgments that can have a significant effect on the amounts recognized in the consolidated financial statements. Management judgment is required in particular when assessing the substance of transactions that have a complicated structure or legal form.

The critical accounting estimates and judgments could potentially have a significant impact on the consolidated financial statements.

The estimates and underlying assumptions are reviewed on an ongoing basis. Changes in estimates may be necessary if there are changes in the circumstances on which the estimate was based, or if more detailed information becomes available. Such changes are recognized in the period in which the estimate in question is revised.

The table shows critical accounting estimates and judgments and their level of potential impact on the consolidated financial statements:

Note	Critical accounting estimates and judgments	Estimate/judgment	Potential impact from estimates and judgments
2.2 Revenue	Revenue recognition	Estimate	● ● ●
2.6 Special items	Classification of special items	Judgment	● ● ●
2.7 Tax	Group tax charge and deferred tax assets	Estimate	● ● ●
3.1 Intangible assets and impairment test of goodwill	Impairment of intangible assets and goodwill	Estimate	● ● ●
3.5 Business acquisitions			
3.6 Contingent consideration	Fair value measurement	Estimate	● ● ●
6.5 Non-controlling interests			
4.1 Inventories	Cost of work in progress and finished goods	Estimate	● ● ●
4.2 Trade receivables and contract assets	Allowances for doubtful trade receivables	Estimate	● ● ●

## 1.2 Basis of reporting (continued)

### Basis of reporting

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and further requirements in the Danish Financial Statements Act. The financial year for the Group is January 1 – December 31.

The consolidated financial statements have been prepared on a going concern basis and under the historical cost convention, with the exception of derivatives, securities, contingent consideration and share purchase liability, which are measured at fair value. The accounting policies are unchanged from last year.

The consolidated environmental, social and governance data have been prepared in accordance with policies that adhere to internationally recognized voluntary reporting standards and principles such as the UN Global Compact (UNGC). Novozymes is a signatory to the UNGC, a voluntary policy initiative for businesses committed to aligning their operations and strategies with ten universally accepted principles in the areas of

human rights, labor, the environment and anti-corruption. We also take inspiration from the Task Force on Climate Related Financial Disclosures (TCFD) framework for climate-related disclosures.

Our reporting and materiality assessments were also inspired by the GRI framework.

The policies are unchanged from last year.

### Introduction of special items in the income statement

As a consequence of the proposed combination of Novozymes and Chr. Hansen, special items are presented in the income statement from 2022.

Introduction of special items has been made to provide a more transparent view of Novozymes' recurring activities and to separate the income and costs from the proposed combination of Novozymes and Chr. Hansen from Novozymes' operating profit.

Please refer to Note 2.6 for more information.

### Defining materiality

The Novozymes Report is based on the concept of materiality, to ensure that the content is material and relevant.

If items are individually immaterial, they are aggregated with other items of a similar nature in the statements or in the notes. Novozymes provides the specific disclosures required by IFRS unless the information is considered immaterial to the economic decision-making of the readers of The Novozymes Report.

As for environmental, social and governance (ESG) matters, we disclose information on issues that are identified by our materiality assessment. The disclosures in the notes include information on our management approach, targets, initiatives, and related progress.

Novozymes' materiality assessment is a systematic and rigorous process that has been aligned with the principles of double materiality. It allows us both to evaluate whether Novozymes has an impact on the environment and society and to identify how ESG issues affect the creation of

long-term value. We have established a two-phased process comprising a comprehensive assessment every three years and a refresh (light-assessment) every year. The process integrates input from external stakeholders, trend analyses and internal engagement with relevant departments including Investor Relations, Risk Management & Controls, Quality, Sustainability and our commercial divisions. This process results in a materiality matrix of economic and ESG issues. The matrix reflects the importance of those issues to our key stakeholders versus their impact on Novozymes, and it is used to guide our strategy and reporting.

As a result of the refresh performed in 2022, no new issues were added to our materiality matrix.

## 1.2 Basis of reporting (continued)

### Limited reporting scope

The environmental data cover those activities that could have a significant impact on the

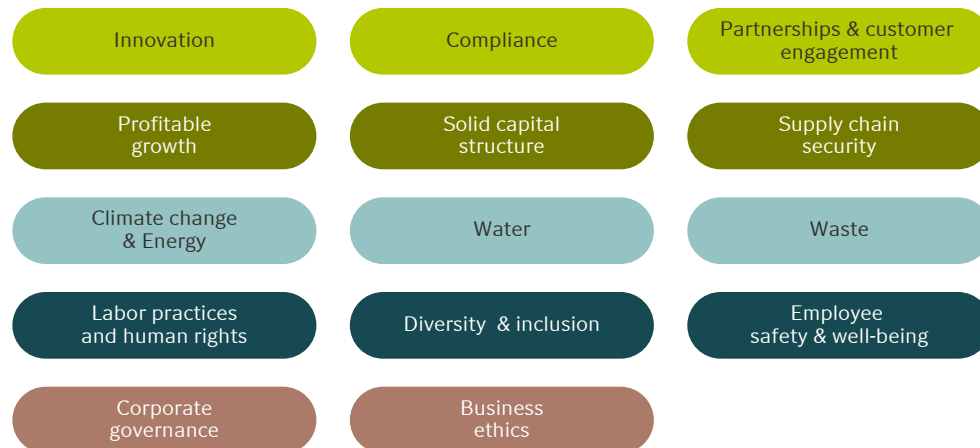
environment. Sites with activities considered not to have a significant environmental impact are not included. Such sites comprise sales offices,

R&D labs, and sites with limited blending and storage of products. However, measures are taken to ensure that at least 97% of the total Novozymes quantity of the measured environmental parameter is included in the reported numbers.

produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, proceeds from selling such items, and the cost of producing those items, must be recognized in profit or loss.

- Annual Improvements to IFRSs (2018–2020) contains minor changes to four standards.

### Select material issues for Novozymes



### Issue category

- All
- Economic
- Environmental
- Governance
- Social

For more information, refer to:  
[www.novozymes.com/en/about-us/sustainability/materiality](http://www.novozymes.com/en/about-us/sustainability/materiality)

Visit

### Impact of new accounting standards

Novozymes has adopted the following new or amended standards and interpretations from January 1, 2022:

- Amendments to IFRS 3 – Business Combinations clarifying the prohibition for recognizing contingent assets acquired in a business combination and replacing outdated references to the Framework.
- Amendments to IAS 37 – Provisions Contingent Liabilities and Contingent Assets specify that the ‘cost of fulfilling’ a contract comprises the ‘costs that relate directly to the contract’ whether being incremental costs of fulfilling that contract or an allocation of other costs that relate directly to fulfilling contracts.
- Amendment to IAS 16 - Property, Plant and Equipment prohibiting deductions from the cost of an item of property, plant and equipment of any proceeds from selling items

The adoption of the new and amended standards and interpretations has not had a significant impact on recognition, measurement, or disclosures in the consolidated financial statements for 2022 and is not anticipated to have a significant impact on future periods.

### New standards and interpretations not yet adopted

IASB has issued new or amended accounting standards and interpretations that have not yet become effective and have consequently not been implemented in the consolidated financial statements for 2022. Novozymes expects to adopt the accounting standards and interpretations as they become mandatory. None of the new or amended standards or interpretations are expected to have a significant impact on the consolidated financial statements.



Note 2

# Net operating profit after tax

- 2.1 Segment
- 2.2 Revenue
- 2.3 Employees
- 2.4 Research and development costs
- 2.5 Other operating income, net
- 2.6 Special items
- 2.7 Tax
- 2.8 Earnings per share

Organic sales  
growth up from 6% in 2021 to

9%

Gross margin down  
from 57.7% in 2021 to

54.6%

EBIT margin down from  
26.8% in 2021 to

26.0%

Net operating profit after tax

## 2.1 Segment

### Segment reporting

The internal reporting framework used for reporting on revenue and expenses to the Executive Leadership Team and the Board of Directors has been established to reflect and report on the global functional responsibility setup at Novozymes. This setup consolidates functions by type, and Management reviews the results of the Group as a whole to assess performance. Thus, there is only one operating segment.

### Worldwide operations

The Group operates in four geographical regions: Europe, Middle East & Africa, North America, Asia Pacific and Latin America. From a revenue perspective, U.S. is the largest single country,

contributing ~31% of the Group's revenue (2021: ~29%).

The geographical distribution of revenue is based on the country in which the goods are delivered. For a number of customers, central deliveries are made to specified locations and the final destination is unknown. The stated geographical distribution of revenue may therefore vary from one year to the next if delivery destinations for these customers change.

Most of the Group's intangible assets and property, plant and equipment are located in Denmark, U.S., India and China.

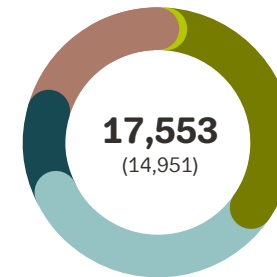
### Intangible assets and property, plant and equipment, largest single countries:

	2022	2021
Denmark	40%	44%
U.S.	33%	25%
India	11%	13%
China	9%	10%

### Revenue 2022 (2021)

DKK million

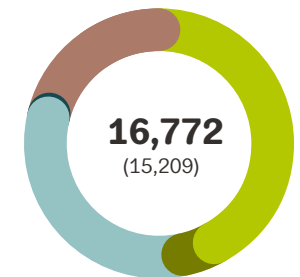
- Denmark **211** (207)
- Rest of Europe, Middle East & Africa **5,884** (5,474)
- North America **5,829** (4,683)
- Latin America **2,063** (1,578)
- Asia Pacific **3,566** (3,009)



### Intangible assets and property, plant and equipment 2022 (2021)

DKK million

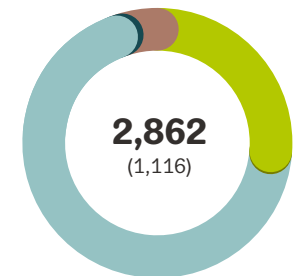
- Denmark **6,747** (6,647)
- Rest of Europe, Middle East & Africa **788** (828)
- North America **5,804** (4,019)
- Latin America **121** (108)
- Asia Pacific **3,312** (3,607)



### Net investments 2022 (2021)

DKK million

- Denmark **754** (431)
- Rest of Europe, Middle East & Africa **3** (-32)
- North America **1,941** (517)
- Latin America **26** (22)
- Asia Pacific **138** (178)



Net operating profit after tax

## 2.2 Revenue

DKK million	2022	2021
<b>Consumer Biosolutions</b>		
Household Care	4,988	4,763
Food, Beverages & Human Health	4,134	3,464
<b>Agriculture &amp; Industrial Biosolutions</b>		
Bioenergy	3,748	2,702
Grain & Tech Processing	2,607	2,236
Agriculture, Animal Health & Nutrition	2,076	1,786
<b>Revenue</b>	<b>17,553</b>	<b>14,951</b>
Emerging markets	6,441	5,448
Developed markets*	11,112	9,503
<b>Revenue</b>	<b>17,553</b>	<b>14,951</b>
Revenue to the five largest customers as a percentage of revenue	23%	25%

\* Developed markets comprise North America, Central Western Europe, Australia, New Zealand, Japan and South Korea. Rest of the world is considered as emerging markets.

Most of Novozymes' revenue is derived from the sale of goods to customers, with revenue being recognized when the goods are delivered.

At January 1, 2022, contract liabilities amounted to DKK 129 million (2021: DKK 67 million), of which DKK 81 million was recognized as revenue in 2022 (2021: DKK 43 million).

As a consequence of the war in Ukraine, Novozymes has discontinued all sales to customers in Russia. This is estimated to have had a negative impact on the organic sales growth in 2022 of around 1%.

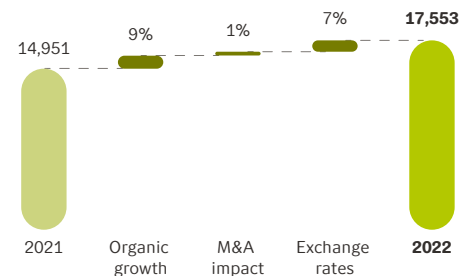
### Critical accounting estimates and judgments

Novozymes has entered into various sales agreements, including agreements where Novozymes manufactures and sells products to a partner, who undertakes the sales to end customers, and where the profit on products sold to end customers is shared between the partner and Novozymes based on

predetermined profit-sharing mechanisms. Recognition of revenue requires judgment and estimates by Management in connection with determining the appropriate revenue recognition as well as the timing of recognition.

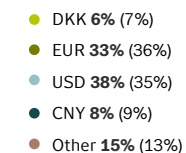
### Sales growth 2022

DKK million



### Sales by currency 2022 (2021)

DKK million



Net operating profit after tax

## 2.2 Revenue (continued)

### Accounting policies

Novozymes produces a wide range of industrial enzymes, microorganisms and probiotics. Revenue includes the sale of goods and related services and royalties, and is recognized at an amount that reflects the consideration to which Novozymes expects to be entitled. Revenue from the straightforward sale of goods to customers is recognized when control of the goods is transferred to the customer, i.e. when goods are delivered. Variable considerations are included in revenue to the extent that they are not subject to significant uncertainty.

The performance obligations in the contracts are to deliver enzymes, microorganisms and probiotics to customers, and each batch delivered is considered a separate performance obligation, as each batch is distinct.

#### Rebates

Enzymes, microorganisms and probiotics are sometimes sold at a rebate. A rebate agreement can be set up in various ways, but common to all agreements is that revenue is

recognized based on the price specified in the contract, net of the estimated rebate. The rebates are estimated based on experience, as well as information related to expected orders 3–12 months in advance. The estimated rebates are reassessed at the end of each reporting period.

#### Returns

A few of Novozymes' markets are granted a right of return. No revenue is recognized for the goods expected to be returned, as a refund liability is recognized. Estimates of the expected level of returns are based on analysis of historical returns and knowledge of the relevant markets/products. These estimates are updated at the end of each reporting period. As the goods returned are usually scrapped, no inventory asset is recognized.

#### Profit split

Novozymes has entered into partnerships where Novozymes manufactures and sells products to a partner, who undertakes the sales to end customers. The profit on products

sold to end customers is shared between the partner and Novozymes based on predetermined profit-sharing mechanisms.

Revenue from these arrangements consists of sales of products to the partner and the shared profit, and is recognized in full when the goods are delivered to the other contracting party. This is done by calculating the expected profit based on insights, experience and other input factors. The calculated profit is recognized as a contract asset or contract liability until an invoice is issued. The profit realized is settled periodically.

#### Commission

Novozymes has entered into commission agreements where agents undertake sales to third parties in return for a commission on realized sales. Revenue from such agreements is recognized when the goods are delivered, as the nature of the performance obligation is to provide the specified goods.

#### Other

Revenue collected on behalf of third parties is not recognized as revenue.

Novozymes' obligation to provide a refund for products that are not of the agreed quality or according to agreed specifications under the standard warranty terms is recognized as contract liabilities.

A trade receivable is recognized when the customer obtains control of the goods and an invoice is issued, as this is the point in time when the consideration becomes unconditional and only the passage of time is required before payment is due. Typical payment terms are around 60 days.

Contract liabilities consist of advance payments, deferred revenue and liabilities for refund goods. The contract liabilities are recognized as revenue as the performance obligations under the contracts are fulfilled.

Net operating profit after tax

## 2.3 Employees

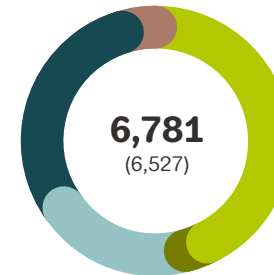
DKK million	2022	2021
Wages and salaries	3,721	3,312
Pensions – defined contribution plans	348	304
Other social security costs	263	274
Other employee costs	151	145
Stock-based payment	127	78
<b>Employee costs</b>	<b>4,610</b>	<b>4,113</b>
Recognized in the income statement under the following items:		
Cost of goods sold	1,654	1,440
Sales and distribution costs	1,209	992
Research and development costs	1,127	1,087
Administrative costs	575	543
	<b>4,565</b>	<b>4,062</b>
Change in employee costs recognized in Inventories	45	51
<b>Employee costs</b>	<b>4,610</b>	<b>4,113</b>

Employee costs in 2021 included severance costs related to the consolidation of research and development activities of DKK 41 million.

### Number of employees at year-end 2022 (2021)

No. of employees

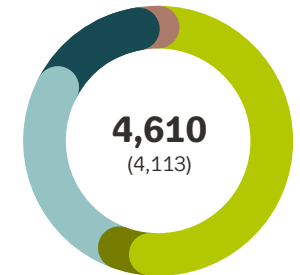
- Denmark  
**2,883** (2,787)
- Rest of Europe, Middle East & Africa  
**238** (214)
- North America  
**1,303** (1,238)
- Asia Pacific  
**2,038** (1,967)
- Latin America  
**319** (321)



### Employee costs 2022 (2021)

DKK million

- Denmark  
**2,383** (2,276)
- Rest of Europe, Middle East & Africa  
**205** (157)
- North America  
**1,244** (1,054)
- Asia Pacific  
**655** (533)
- Latin America  
**123** (93)



Net operating profit after tax

## 2.3 Employees (continued)

DKK million	2022	2021
Average number of employees in the Group	6,690	6,240
Average number of employees who work with R&D	1,279	1,330
Number of employees outside Denmark as a percentage of total number of employees	57%	57%
Part-time employees	343	343
Full-time employees	6,438	6,184
<b>Employees at December 31</b>	<b>6,781</b>	<b>6,527</b>
Senior management	214	199
Management	1,388	1,326
Professional	1,894	1,753
Administrative	737	731
Skilled workers, laboratory technicians and other technicians	1,178	1,189
Process operators	1,370	1,329
<b>Employees by category at December 31</b>	<b>6,781</b>	<b>6,527</b>

### Employee gender distribution 2022 (2021)

- Women **39%** (39%)
- Men **61%** (61%)



### Senior management gender distribution 2022 (2021)

- Women **33%** (34%)
- Men **67%** (66%)



#### Accounting policies

The number of employees is derived from contractual obligations, but does not include employees on unpaid leave, temporary replacements, student interns, agency employees, consultants or PhD students. In the calculation of the number of full-time employees, employees with a working time ratio of 95% or more are counted as full-time employees.

The average number of employees is calculated as the average of the number of permanent employees at the end of each month.

Job categories are defined as follows: Senior management comprises the CEO, executive vice presidents, vice presidents and directors. Management comprises middle managers and specialists. Professional comprises employees with academic backgrounds as well as team leaders. Process operators comprises operators and unskilled workers.

All of the above classifications are based on internal job categories.



Net operating profit after tax

## 2.4 Research and development costs

DKK million	Note	2022	2021
Internal and external research and development costs		528	575
Employee costs	2.3	1,127	1,087
Amortization and impairment losses, intangible assets	3.1	182	184
Depreciation and impairment losses, property, plant and equipment	3.2	164	163
<b>Total research and development costs</b>	<b>I/S</b>	<b>2,001</b>	<b>2,009</b>
As a percentage of revenue		11.4%	13.4%

Due to significant uncertainty associated with the development of new products, none of the development projects met the criteria for capitalization in 2022 and 2021.

In 2022, Novozymes launched 26 new products (2021: 14 new products). New products comprise products with new or improved characteristics.

In 2022, Novozymes had 892 active patent families (2021: 902). Active patent families comprise the number of inventions for which Novozymes had one or more active patent applications or active patents at December 31.

### Accounting policies

Research and development costs primarily comprise employee costs, internal and external costs related to the development of new products and to the ongoing optimization of production processes for existing products, and amortization, depreciation and impairment losses related to intangible assets and property, plant and equipment used in research and development activities.

Research costs are expensed as incurred, while development costs are expensed as incurred unless the criteria for capitalization are deemed to have been met.

Income received from research and collaboration agreements is recognized in Other operating income.

Net operating profit after tax

## 2.5 Other operating income, net

DKK million	2022	2021
Income and grants concerning research projects/collaborations	10	13
Gain from 21 <sup>st</sup> .BIO transaction	201	-
Net gain from divestment of a pharma-related royalty	-	62
Net gain from sale of buildings held for sale	-	60
Other secondary income, net	65	53
<b>Other operating income, net</b>	<b>276</b>	<b>188</b>

In 2022, Other operating income was impacted by DKK 201 million from an accounting gain related to the 21<sup>st</sup>.BIO transaction, in which Novozymes Biotechnology ApS merged with 21<sup>st</sup>.BIO. Following the transaction, Novozymes obtained significant influence in 21<sup>st</sup>.BIO, and 21<sup>st</sup>.BIO is recognized as an associated company of Novozymes.

In 2021, Other operating income was impacted by DKK 60 million due to a realized gain from the sale of an administration building and by DKK 62 million from the contingent consideration relating to the divestment of a pharma-related royalty. Contingent consideration was recognized where entitlement was obtained due to completion of patent registrations.

### Accounting policies

Other operating income comprises income that is not product-related and that is not defined as special items. This includes income from research and collaboration agreements, government grants, sale of licenses, patents, etc., and other income of a

secondary nature in relation to the main activities of the Group. This item also includes non-recurring income items in respect of damages, outlicensing, etc., and gains and losses on divestments.

Net operating profit after tax

## 2.6 Special items

DKK million	2022	2021
Transaction costs related to the proposed combination of Novozymes and Chr. Hansen	(68)	-
<b>Special items</b>	<b>(68)</b>	<b>-</b>

Special items reconcile to the income statement as specified below:

### Special items bridge

DKK million	2022			2021		
	Reported income statement	Special items	Adjusted income statement	Reported income statement	Special items	Adjusted income statement
Revenue	17,553	-	17,553	14,951	-	14,951
Cost of goods sold	(7,976)	-	(7,976)	(6,328)	-	(6,328)
<b>Gross profit</b>	<b>9,577</b>	<b>-</b>	<b>9,577</b>	<b>8,623</b>	<b>-</b>	<b>8,623</b>
Sales and distribution costs	(2,271)	(67)	(2,338)	(1,936)	-	(1,936)
Research and development costs	(2,001)	-	(2,001)	(2,009)	-	(2,009)
Administrative costs	(952)	(1)	(953)	(859)	-	(859)
Other operating income, net	276	-	276	188	-	188
<b>Operating profit (EBIT) before special items</b>	<b>4,629</b>	<b>(68)</b>	<b>4,561</b>	<b>4,007</b>	<b>-</b>	<b>4,007</b>
Special items	(68)	68	-	-	-	-
<b>Operating profit (EBIT)</b>	<b>4,561</b>	<b>-</b>	<b>4,561</b>	<b>4,007</b>	<b>-</b>	<b>4,007</b>

Net operating profit after tax

## 2.6 Special items (continued)

### Critical accounting estimates and judgments

Special items are used in the presentation of the income statement and include significant non-recurring income or costs not related to Novozymes' recurring operating profit. These items are classified separately in the income statement as Special items in order to provide a more transparent view of Novozymes' operating profit.

The use of special items entails management judgement in the separation from other items in the income statement.

Management considers individual items in order to ensure that special items include significant non-recurring income or costs not related to Novozymes' recurring operating profit.

Special items include income or costs from the proposed combination of Novozymes and Chr. Hansen.

## 2.7 Tax

### Tax risks

In many markets, Novozymes operates through sales companies and distributors, whereas production is located in only a few countries. This leads to transactions between group companies. Novozymes follows the OECD principles in setting internal transfer prices for these transactions. This is a complicated area and entails a tax risk, because the transactions are subject to judgment in each country. The tax controversy risk for Novozymes is significantly reduced through the use of bilateral advance pricing agreements (APAs).

### Bilateral APAs

As stated in our tax policy, Novozymes proactively engages in bilateral APAs negotiated at competent authority level to increase predictability and to mitigate transfer pricing risks. Most of the inter-company transaction value within the Novozymes Group is covered by bilateral APAs.

An APA is an agreement between a taxpayer and a tax authority determining the transfer pricing methodology for pricing the taxpayer's international transactions for future years.

The methodology is applied for a certain period based on the fulfilment of certain terms and conditions (called critical assumptions). An APA can be unilateral or bilateral. Novozymes only enters into bilateral APAs, meaning that they are negotiated between the competent tax authorities of the two countries involved in the transaction. An APA provides assurance with respect to the tax outcome of our international transactions, by determining in advance arm's length pricing and the pricing methodology to be applied to the international transactions.

Novozymes has entered into bilateral APAs with the tax authorities in the countries where international transactions are most significant. Included in APA-covered transactions are group internal transactions between Denmark and the U.S., China and India, respectively.

Net operating profit after tax

## 2.7 Tax (continued)

### Joint taxation

Novozymes A/S and its Danish subsidiaries are jointly taxed with the Danish companies of the Novo Holdings A/S Group. Joint taxation also covers withholding taxes in the form of dividend tax, royalty tax and interest tax. The Danish

companies are jointly and individually liable for the joint taxation liability. Any subsequent adjustments to income taxes and withholding taxes may increase the liability. Tax for the individual companies is allocated in full on the basis of the expected taxable income.

### Tax in the income statement

DKK million	2022	2021
Tax payable on net profit	(818)	(941)
Change in deferred tax	(105)	139
Prior-year adjustments - current tax	76	(41)
Prior-year adjustments - deferred tax	(23)	64
<b>Tax in the income statement</b>	<b>(870)</b>	<b>(779)</b>
Calculation of effective tax rate:		
Corporate tax rate in Denmark	(22.0)%	(22.0)%
Non-taxable income less non-deductible expenses	(0.3)%	0.5%
Difference in foreign tax rates	(0.3)%	2.1%
Other adjustments	3.5%	(0.5)%
<b>Effective tax rate</b>	<b>(19.1)%</b>	<b>(19.9)%</b>

### Tax in the income statement

The effective tax rate for 2022 was positively impacted by the accounting gain related to 21<sup>st</sup>. BIO and the divestment of Novozymes' minority ownership in Albumedix. In addition, there was a positive impact from a fair value adjustment of contingent consideration. The total positive

impact of 3.3 percentage points is recognized in Other adjustments. In 2021 the effective tax rate was positively impacted by a transfer of intellectual property from Switzerland to Denmark (2.7 percentage points), which was recognized in Difference in foreign tax rates.

### Critical accounting estimates and judgments

As the Group operates across many different countries, the calculation of the Group's total tax charge in the income statement inherently involves estimation. Tax and transfer-pricing disputes with authorities in various countries may occur, and Management's assessment is applied to assess the possible outcome of such disputes.

The Group recognizes deferred tax assets, including the expected tax value of tax loss carryforwards, if management assesses they can be offset against positive taxable income

in the foreseeable future. This judgment is made annually and based on budgets and business plans for the coming years, including planned commercial initiatives.

Payments in respect of tax liabilities for an accounting period result from payments on account and on the final resolution of open items. As a result, there may be substantial differences between the tax charge recognized in the consolidated income statement and actual tax payments.

Net operating profit after tax

## 2.7 Tax (continued)

Deferred tax DKK million	Deferred tax assets		Deferred tax liabilities	
	2022	2021	2022	2021
Intangible assets and property, plant and equipment	716	915	(1,447)	(1,507)
Inventories	295	438	(93)	(246)
Tax loss carry-forwards	85	53	-	-
Stock options	67	250	-	-
Other	406	442	(59)	(45)
	<b>1,569</b>	<b>2,098</b>	<b>(1,599)</b>	<b>(1,798)</b>
Offsetting items	54	(461)	(54)	461
<b>Deferred tax at December 31</b>	<b>1,623</b>	<b>1,637</b>	<b>(1,653)</b>	<b>(1,337)</b>

The tax value of the unrecognized share of tax loss carry-forwards, tax credits, etc. that do not expire amounted to DKK 50 million (2021: DKK 22 million).

DKK million	2022	2021
Deferred tax at January 1	300	135
Currency translation adjustments	3	9
Effect of business acquisitions	(7)	(236)
Tax related to the income statement	(128)	204
Tax on equity items	(198)	188
<b>Deferred tax at December 31</b>	<b>(30)</b>	<b>300</b>
Deferred tax assets	1,623	1,637
Deferred tax liabilities	(1,653)	(1,337)
<b>Deferred tax at December 31</b>	<b>(30)</b>	<b>300</b>

### Tax receivables and payables

DKK million	2022	2021
Tax payables, net, at January 1	(200)	124
Currency translation adjustments	46	18
Tax related to business acquisitions	-	(26)
Tax related to the income statement	(742)	(983)
Tax on equity items	12	40
Tax paid for the current year, net	910	627
<b>Tax payables, net, at December 31</b>	<b>26</b>	<b>(200)</b>
Tax receivables	352	286
Tax payables	(326)	(486)
<b>Tax payables, net, at December 31</b>	<b>26</b>	<b>(200)</b>
Of which due within 12 months	5	(40)
Of which due after more than 12 months	21	(160)
<b>Tax payables, net, at December 31</b>	<b>26</b>	<b>(200)</b>
Corporate income taxes paid are specified as follows:		
Income taxes paid in Denmark	610	460
Income taxes paid outside Denmark	300	167
<b>Total income taxes paid</b>	<b>910</b>	<b>627</b>



Net operating profit after tax

## 2.7 Tax (continued)

### Accounting policies

Corporation tax, comprising the current tax liability, change in deferred tax for the year and possible adjustments relating to prior years, is recognized in the income statement, unless it relates to items recognized either in Other comprehensive income or directly in equity. Uncertain tax positions are assessed individually and recognized if it is probable that an amount will be paid or received. Deferred tax is measured using the balance sheet liability method and comprises all temporary differences between the carrying amount and the tax base of assets and liabilities. No deferred tax is recognized for goodwill, unless amortization of goodwill for tax

purposes is allowed. The tax value of tax loss carry-forwards is included in the calculation of deferred tax to the extent that the tax losses can be expected to be utilized in the future.

Deferred tax is measured according to current tax rules and at the tax rate expected to be in force on elimination of temporary differences. Changes in deferred tax due to tax rate changes are recognized in the income statement, unless they relate to items recognized either in Other comprehensive income or directly in equity.

## 2.8 Earnings per share

DKK million	2022	2021
Net profit for the year	3,686	3,145
Less net profit attributable to non-controlling interests	(10)	1
<b>Net profit attributable to the shareholders of Novozymes A/S</b>	<b>3,676</b>	<b>3,146</b>
<b>Average number of shares</b>		
Weighted average number of shares in circulation	276,644,153	277,919,162
Average dilutive effect of outstanding stock options and stock awards	2,089,765	2,308,943
<b>Average number of diluted shares</b>	<b>278,733,918</b>	<b>280,228,105</b>
Earnings per share, DKK	13.29	11.32
Earnings per share, diluted, DKK	13.19	11.23

### Accounting policies

Earnings per share is calculated as net profit attributable to shareholders of Novozymes A/S divided by the average number of shares in circulation.

Diluted earnings per share is calculated as net profit attributable to shareholders of Novozymes A/S divided by the average number of shares in circulation, including the dilutive effect of stock options “in the money.”

Note 3

# Invested capital

- 3.1 Intangible assets and impairment test of goodwill
- 3.2 Property, plant and equipment
- 3.3 Leases
- 3.4 Provisions
- 3.5 Business acquisitions
- 3.6 Contingent consideration

Increase in average  
invested capital  
of DKK million

2,805

ROIC down from 19.3%  
in 2021 to

17.6%

Net investments excl. acquisitions  
up from DKK 1,116 million in  
2021 to DKK million

2,862

## Invested capital

## 3.1 Intangible assets and impairment test of goodwill

DKK million	Goodwill	Acquired patents, trademarks, licenses and know-how, etc.	Completed IT development projects	IT development projects in progress	Total
Cost at January 1, 2022	2,020	5,002	839	150	8,011
Currency translation adjustments	(11)	(33)	1	2	(41)
Additions from business acquisitions	(2)	-	-	-	(2)
Additions during the year	-	-	22	108	130
Disposals during the year	-	-	(1)	-	(1)
Transfers to/(from) other items	-	-	80	(80)	-
<b>Cost at December 31, 2022</b>	<b>2,007</b>	<b>4,969</b>	<b>941</b>	<b>180</b>	<b>8,097</b>
Amortization and impairment losses at January 1, 2022		(2,348)	(639)		(2,987)
Currency translation adjustments		(5)	(1)		(6)
Amortization during the year		(281)	(98)		(379)
Impairment losses		(28)	-		(28)
Disposals during the year		-	1		1
<b>Amortization and impairment losses at December 31, 2022</b>		<b>(2,662)</b>	<b>(737)</b>		<b>(3,399)</b>
<b>Carrying amount at December 31, 2022</b>	<b>2,007</b>	<b>2,307</b>	<b>204</b>	<b>180</b>	<b>4,698</b>

### Additions from business acquisitions

No acquisitions were made in 2022.

In 2021, Novozymes acquired DKK 2,554 million of intangible assets through the acquisition of Microbiome Labs and Synergia Life Sciences, of which DKK 1,709 million primarily related to

patents and know-how (technology), customer relationships and brands.

### Impairment

In 2022, an impairment loss of DKK 28 million on a know-how asset was recognized as the use of this know-how asset ceased. The impairment loss

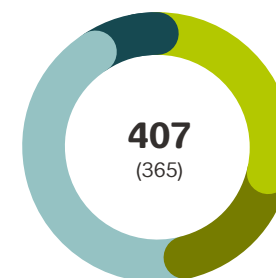
was recognized in Cost of goods sold and Research and development costs at DKK 13 million and DKK 15 million respectively.

In 2021, an impairment loss of DKK 27 million on a know-how asset was recognized as the use of

### Recognition of amortization and impairment losses by function 2022 (2021)

DKK million

- Cost of goods sold  
**117** (92)
- Sales and distribution  
**71** (50)
- Research and development  
**182** (184)
- Administration  
**37** (39)



this know-how ceased. The impairment loss was recognized in Research and development costs.

### Impairment test of goodwill

An impairment test of goodwill of Novozymes' cash-generating units (CGUs) is performed for the entire Group, as cost bases of the cash-generating units cannot be measured at CGU level. As the market value of Novozymes is significantly higher than its equity, no further key assumptions are used to determine whether impairment of goodwill exists (2021: no impairment).

Invested capital

## 3.1 Intangible assets and impairment test of goodwill (continued)

DKK million	Goodwill	Acquired patents, trademarks, licenses and know-how, etc.	Completed IT development projects	IT development projects in progress	Total
Cost at January 1, 2021	1,098	3,235	745	84	5,162
Currency translation adjustments	33	48	2	-	83
Additions from business acquisitions	889	1,709	-	-	2,598
Additions during the year	-	11	31	127	169
Disposals during the year	-	(1)	-	-	(1)
Transfers to/(from) other items	-	-	61	(61)	-
<b>Cost at December 31, 2021</b>	<b>2,020</b>	<b>5,002</b>	<b>839</b>	<b>150</b>	<b>8,011</b>
Amortization and impairment losses at January 1, 2021		(2,068)	(540)		(2,608)
Currency translation adjustments		(12)	(2)		(14)
Amortization during the year		(241)	(97)		(338)
Impairment losses		(27)	-		(27)
<b>Amortization and impairment losses at December 31, 2021</b>		<b>(2,348)</b>	<b>(639)</b>		<b>(2,987)</b>
<b>Carrying amount at December 31, 2021</b>	<b>2,020</b>	<b>2,654</b>	<b>200</b>	<b>150</b>	<b>5,024</b>

## Invested capital

## 3.1 Intangible assets and impairment test of goodwill (continued)

### Critical accounting estimates and judgments

Management assesses the risk of impairment of the Group's intangible assets. This requires judgment in relation to the identification of cash-generating units (CGUs) and the underlying assumptions in the Group's impairment model.

If there is any indication of impairment for intangible assets other than goodwill, value in use is estimated and compared with the carrying amount. The calculation of value in use is based on the discounted cash flow method using estimates of future cash flows from the

continuing use. The key parameters are the expected revenue streams and the rate used to discount the cash flows.

### Accounting policies

Intangible assets other than goodwill are measured at cost less accumulated amortization and impairment losses. Goodwill and IT development projects in progress are not subject to amortization.

Costs associated with large IT projects for the development of software for internal use are capitalized if incurred with a view to developing new and improved systems.

Amortization is based on the straight-line method over the expected useful lives of the finite-lived assets, as follows:

- Completed IT development projects are amortized over their useful lives. IT development assets are amortized over a period of 3–5 years.
- Acquired patents, trademarks, licenses, know-how, customer relationships and brands are amortized over their useful lives. The useful lives of patents and trademarks

are normally identical to the patent period. Licenses are amortized over the contractual period. Recognized patents, trademarks, licenses, know-how, customer relationships and brands are amortized over a period of 7–20 years.

Expected useful lives are reassessed annually.

The Group regularly reviews the carrying amounts of its finite-lived intangible assets to determine whether there is an indication of

impairment. An impairment loss is recognized to the extent that the asset's carrying amount exceeds its estimated recoverable amount. Impairment losses are reversed only to the extent of changes in the assumptions and estimates underlying the impairment calculation.

Goodwill is tested for impairment annually or whenever there is an indication that it may be impaired.

Invested capital

## 3.2 Property, plant and equipment

DKK million	Land and buildings	Plant and machinery	Other equipment	Assets under construction	Total
Cost at January 1, 2022	7,551	11,958	2,696	876	23,081
Currency translation adjustments	86	185	38	25	334
Additions from business acquisitions	-	(8)	(1)	-	(9)
Additions during the year	129	124	117	2,432	2,802
Disposals during the year	(178)	(107)	(73)	-	(358)
Transfers to/(from) other items	123	211	103	(437)	-
<b>Cost at December 31, 2022</b>	<b>7,711</b>	<b>12,363</b>	<b>2,880</b>	<b>2,896</b>	<b>25,850</b>
Depreciation and impairment losses at January 1, 2022	(3,571)	(7,668)	(1,657)	-	(12,896)
Currency translation adjustments	(26)	(90)	(20)	-	(136)
Depreciation for the year	(286)	(550)	(242)	-	(1,078)
Disposals during the year	171	96	67	-	334
<b>Depreciation and impairment losses at December 31, 2022</b>	<b>(3,712)</b>	<b>(8,212)</b>	<b>(1,852)</b>	<b>-</b>	<b>(13,776)</b>
<b>Carrying amount at December 31, 2022</b>	<b>3,999</b>	<b>4,151</b>	<b>1,028</b>	<b>2,896</b>	<b>12,074</b>

### Capitalized interest and pledges

Interest of DKK 9 million (2021: DKK 1 million) was capitalized under Additions during the year and recognized as Investing activities in the statement of cash flows. Capitalization rate: 0.82% (2021: 0.50%).

Land and buildings with a carrying amount of DKK 1,366 million (2021: DKK 1,453 million) were pledged as security to credit institutions in respect of mortgage loans expiring in 2029 and 2039.

### Impairment

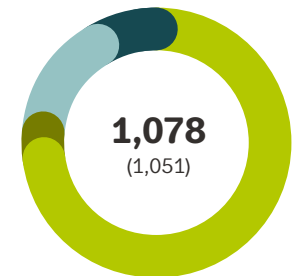
No impairment loss was recognized in 2022.

In 2021, an impairment loss of DKK 15 million on a building was recognized and included in Cost of goods sold.

### Recognition of depreciation and impairment losses by function 2022 (2021)

DKK million

Cost of goods sold	787 (762)
Sales and distribution	37 (32)
Research and development	164 (163)
Administration	90 (94)



As a consequence of the war in Ukraine, Novozymes has discontinued all sales to Russia and closed the sales office in Moscow, Russia. The closing did not lead to any impairment of property, plant and equipment.



## Invested capital

## 3.2 Property, plant and equipment (continued)

DKK million	Land and buildings	Plant and machinery	Other equipment	Assets under construction	Total
Cost at January 1, 2021	6,986	11,017	2,364	682	21,049
Currency translation adjustments	282	528	96	37	943
Additions from business acquisitions	43	41	2	4	90
Additions during the year	185	276	214	513	1,188
Disposals during the year	(43)	(50)	(96)	-	(189)
Transfers to/(from) other items	98	146	116	(360)	-
<b>Cost at December 31, 2021</b>	<b>7,551</b>	<b>11,958</b>	<b>2,696</b>	<b>876</b>	<b>23,081</b>
Depreciation and impairment losses at January 1, 2021	(3,133)	(6,881)	(1,423)		(11,437)
Currency translation adjustments	(141)	(320)	(62)		(523)
Depreciation for the year	(305)	(509)	(222)		(1,036)
Impairment losses	(15)	-	-		(15)
Disposals during the year	27	39	49		115
Transfers (to)/from other items	(4)	3	1		-
<b>Depreciation and impairment losses at December 31, 2021</b>	<b>(3,571)</b>	<b>(7,668)</b>	<b>(1,657)</b>		<b>(12,896)</b>
<b>Carrying amount at December 31, 2021</b>	<b>3,980</b>	<b>4,290</b>	<b>1,039</b>	<b>876</b>	<b>10,185</b>

### Contractual obligations

Contractual obligations to third parties relating to property, plant and equipment amounted to DKK 712 million (2021: DKK 1,328 million).

Novozymes is committed to establishing the new production line in Blair, Nebraska, U.S. The capital investment of roughly DKK 2 billion will span the period 2021–2023 with expected completion by the end of 2023. Most of the investment activities will take place in 2022 and 2023.

An accumulated amount of DKK 1,661 million has been incurred since the investment was initiated (2021: DKK 170 million).

The contractual obligations to third parties relating to property, plant and equipment related to the above production line amounted to DKK 335 million at December 31, 2022 (2021: DKK 1,156 million).

## Invested capital

## 3.2 Property, plant and equipment

(continued)

### Accounting policies

Property, plant and equipment is measured at cost less accumulated depreciation and impairment losses. Borrowing costs in respect of construction of major assets are capitalized.

Depreciation is based on the straight-line method over the expected useful lives of the assets, as follows:

- Buildings: 12–50 years
- Plant and machinery: 5–25 years
- Other equipment: 3–18 years

The residual values and useful lives of the assets are reviewed on an annual basis and adjusted if necessary at each reporting date.

The Group regularly reviews the carrying amounts of its property, plant and equipment to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of any impairment loss. If the recoverable amount of an asset is estimated to be lower than its carrying amount, the carrying amount is reduced to the recoverable amount. Impairment losses are reversed only to the extent of changes in the assumptions and estimates underlying the impairment calculation.

## 3.3 Leases

DKK million	2022	2021
Land and buildings	254	290
Plant and machinery	87	93
Other equipment	79	113
<b>Carrying amount of lease assets</b>	<b>420</b>	<b>496</b>

Additions to the lease assets during 2022 amounted to DKK 42 million (2021: DKK 102 million).

DKK million	2022	2021
<b>Lease liabilities</b>		
Less than 1 year	128	121
Between 1 and 5 years	222	267
More than 5 years	119	142
<b>Undiscounted lease liabilities at December 31</b>	<b>469</b>	<b>530</b>

DKK million	2022	2021
<b>Amounts recognized in the income statement</b>		
Interest on lease liabilities	19	21
<b>Depreciation of lease assets per asset class</b>		
Land and buildings	65	59
Plant and machinery	5	6
Other equipment	49	45
<b>Depreciation of lease assets</b>	<b>119</b>	<b>110</b>
<b>Amounts recognized in the statement of cash flows</b>		
Total cash outflow for leases	139	124

Invested capital

## 3.3 Leases (continued)

### Accounting policies

#### Lease assets

Lease assets are 'right-of-use assets' from lease agreements. If, at inception, it is assessed that a contract contains a lease, a lease asset is recognized. Lease assets are initially measured at the present value of future lease payments, plus the cost of obligations to refurbish the asset. Payments include fixed payments, variable lease payments depending on an index or a rate and the exercise price of purchase options that are reasonably certain to be exercised.

Lease assets are depreciated using the straight-line method over the shorter of the expected lease term and the useful life of the underlying asset. Lease assets are tested for impairment whenever there is an indication that the assets may be impaired.

Lease assets are depreciated as follows:

- Buildings: 1–12 years
- Land: 10–90 years
- Plant and machinery: 1–10 years
- Other equipment: 1–10 years

Short-term leases and leases of low value are recognized as expenses in the income statement on a straight-line basis over the lease term.

Novozymes' portfolio of leases covers leases of land, buildings, plant and machinery and other equipment such as cars and transportation containers.

#### Lease liabilities

Lease liabilities are initially recognized at the present value of future lease payments including payments from extension or purchase options that are considered reasonably certain to be exercised.

The lease liability is measured using the implicit borrowing rate in the contracts or, where this is not available, the marginal borrowing rate in the countries in which Novozymes operates. Novozymes applies a single discount rate to portfolios of leases in the countries in which Novozymes operates based on contract currency and loan periods.

If a lease contract is modified, the lease liability is remeasured. For building leases, lease terms are estimated taking the size of the building and its strategic importance into consideration. Novozymes has entered into several open-ended building leases and building leases with extension options. Lease terms of such agreements are estimated based on the strategic importance of the buildings and the estimated time frame necessary to vacate the premises. The estimated lease term is reassessed at each reporting date. The estimated lease terms for such contracts do not exceed 12 years.

Invested capital

## 3.4 Provisions

DKK million	2022			2021		
	Dismantling and restoration	Legal and other obligations	Total	Dismantling and restoration	Legal and other obligations	Total
Provisions at January 1	56	118	174	64	141	205
Currency translation adjustments	2	(2)	-	1	1	2
Additions from business acquisitions	-	(35)	(35)	-	50	50
Additions during the year	-	3	3	-	4	4
Reversals during the year	-	(13)	(13)	(9)	(69)	(78)
Utilization during the year	-	-	-	-	(9)	(9)
<b>Provisions at December 31</b>	<b>58</b>	<b>71</b>	<b>129</b>	<b>56</b>	<b>118</b>	<b>174</b>
Recognized in the balance sheet as follows:						
Non-current	52	67	119	51	102	153
Current	6	4	10	5	16	21
<b>Provisions at December 31</b>	<b>58</b>	<b>71</b>	<b>129</b>	<b>56</b>	<b>118</b>	<b>174</b>

### Dismantling and restoration

Dismantling and restoration relates to estimated future costs of environmental restoration.

Novozymes aims for its production sites not to have a negative environmental impact. These liabilities relate to established circumstances, and the costs are expected to be incurred either when concrete measures are implemented or when a site is vacated. The expected costs and timing are inherently uncertain.

### Legal and other obligations

Novozymes is involved in a number of ongoing legal disputes, and provisions are made for the estimated costs based on a current evaluation of the outcomes. Current ongoing cases are expected to be finalized in 2023–2024. In Management's opinion, the outcomes of these cases are not expected to give rise to any significant losses beyond the amounts provided for at December 31, 2022.

Other obligations include other long-term employee benefits and other contractual obligations.

In 2021, Additions from business acquisitions of DKK 50 million were related to the acquisition of Synergia Life Sciences. In 2022, the provisions in the final opening balance of Synergia Life Sciences were reduced by DKK 35 million.

### Accounting policies

Provisions are recognized where a legal or constructive obligation has been incurred as a result of past events and it is probable that it will lead to an outflow of financial resources. Provisions are measured at the present value of the expected expenditure required to settle the obligation.

In 2021, contingent consideration of DKK 62 million related to the divestment of a pharmaceutical royalty was recognized in Other operating income. The remaining consideration was reversed because certain patent registrations were not obtained in 2021.

Other long-term employee benefits account for only a minor amount, as most of Novozymes' pension plans are defined contribution plans, covering approximately 99% of employees. These obligations are mainly expected to be incurred over a relatively long period of time.

Invested capital

## 3.5 Business acquisitions

No acquisitions were made in 2022.

DKK million	Synergia Life Sciences <sup>1</sup>
<b>Fair value of acquired assets and liabilities are as follows:</b>	
Intangible assets excluding goodwill	991
Property, plant and equipment	75
Inventories	8
Trade and other receivables	42
Cash and cash equivalents	112
Deferred tax liabilities, net	(243)
Financial and other liabilities	(60)
Non-controlling interests	(371)
<b>Acquired net assets</b>	<b>554</b>
Purchase price:	
Cash	982
Deferred consideration	77
<b>Total purchase price</b>	<b>1,059</b>
<b>Goodwill</b>	<b>505</b>
Cash flow for acquisition:	
Cash payment	982
Less cash and cash equivalents in acquired business	(112)
<b>Cash outflow for acquisition</b>	<b>870</b>

1. The final opening balance mainly includes changes to Property, plant and equipment, Deferred tax liabilities and Financial and other liabilities as provisionally presented in The Novozymes Report 2021.

### Adjustment to prior-year business acquisitions

The fair value and allocation of acquired assets, liabilities and non-controlling interests in Synergia Life Sciences was finalized in 2022, which led to a reduction of goodwill of DKK 2 million at the acquisition date. The final opening balance mainly includes changes to Property, plant and equipment, Deferred tax liabilities and Financial and other liabilities as provisionally presented in The Novozymes Report 2021.

In 2021, the most probable sales and EBITDA related to PrecisionBiotics Group were reassessed. This led to an increase of DKK 44 million in the fair value of contingent consideration and goodwill at the acquisition date.

### Acquisitions in 2021

#### Synergia Life Sciences

On December 10, 2021, Novozymes acquired 60% of the shares in Synergia Life Sciences.

Synergia Life Sciences is a leading player within spore probiotics and vitamin K2-7. Synergia Life Sciences has a global footprint and adds strong developing and manufacturing capabilities in spore probiotics and vitamin K2-7 from three production sites in India. Synergia Life Sciences

is a producer and supplier to Microbiome Labs, which was acquired by Novozymes early in 2021.

The vitamin K2-7 portfolio is a strong complementary enabler to support growth in Novozymes' BioHealth platform. The acquisition offers a scientifically proven spore strain portfolio that strengthens Novozymes' human health business and accelerates its functional food offerings.

The purchase price led to the recognition of goodwill of DKK 505 million and intangible assets of DKK 991 million. Goodwill is attributable to expected synergies with Novozymes' existing business operations and technologies within spore probiotics for human health and is highly synergistic to the previous acquisition of Microbiome Labs within the human health business. The goodwill is not tax deductible.

The following valuation techniques have been applied in the fair value assessment of significant assets acquired:

- Technology; the Relief from Royalty (RfR) method
- Customer relationships; The Multi-period Excess Earnings Method (MEEM)
- Brands; The Relief from Royalty (RfR) method

Invested capital

## 3.5 Business acquisitions (continued)

The remaining 40% of the shares in Synergia Life Sciences are held by non-controlling interests. The non-controlling interests are recognized at its proportionate share of the acquired net identifiable assets and amount to DKK 371 million.

The remaining 40% is to be acquired in 2025. Reference is made to Note 6.5 concerning Non-controlling interests.

The purchase price includes a deferred consideration of DKK 77 million, which was paid in 2022.

For further details, please refer to Note 3.5 in The Novozymes Report 2021.

### Microbiome Labs

On January 7, 2021, Novozymes acquired all shares in Microbiome Labs at a purchase price of DKK 1,107 million. Microbiome Labs offers a comprehensive suite of proprietary probiotic and microbiome solutions targeting gastrointestinal, immune, metabolic, and cognitive health. The solutions are marketed under both the company's own supplement brands and in private label products. The branded products are sold exclusively through the company's access to an

extensive network of healthcare practitioners predominately consisting of medical doctors, nutritionists and naturopaths.

The purchase price led to the recognition of goodwill of DKK 338 million and intangible assets of DKK 718 million. Goodwill is attributable to expected synergies with Novozymes' existing business operations and technologies within probiotics and enzymes for human health. The goodwill is tax deductible.

The purchase agreement includes a contingent consideration of up to DKK 825 million at the acquisition date. The consideration is contingent on the achievement of sales targets for 2022 and is recognized at the anticipated fair value of DKK 338 million at the acquisition date. Fair value is assessed by using the earn-out from the most probable sales estimates in 2022 discounted at a rate of 8%.

For further details, please refer to Note 3.5 in The Novozymes Report 2021.

### Critical accounting estimates and judgments

Fair value measurement of the acquired assets and liabilities as well as contingent consideration requires Management to make estimates and use assumptions, as observable

market prices are not available. The determined fair values are associated with uncertainty and may be subject to subsequent adjustments.

### Accounting policies

On acquisition of companies, the identifiable assets acquired and the liabilities and contingent liabilities assumed are recognized at their fair values at the acquisition date. The consideration transferred includes the fair value at the acquisition date of any contingent consideration arrangement.

Non-controlling interests in an acquired company is recognized either at fair value or at the non-controlling interest's proportionate share of the acquired company's net identifiable assets.

This decision is made on an acquisition-by-acquisition basis.

Goodwill may subsequently be adjusted for changes in the fair value of the consideration transferred and/or changes in the fair value of the identifiable net assets acquired until 12 months after the acquisition date, to the extent such changes relate to facts and circumstances present at the acquisition date. Acquired companies are consolidated from the date of acquisition. Acquisition-related costs are expensed as incurred.



Invested capital

## 3.6 Contingent consideration

DKK million	2022	2021
Contingent consideration at January 1	543	146
Additions from business acquisitions	-	382
Currency translation adjustments	19	27
Interest on contingent consideration	43	50
Fair value adjustment of contingent consideration	(223)	(62)
<b>Contingent consideration at December 31</b>	<b>382</b>	<b>543</b>
Recognized in the balance sheet as follows:		
Non-current	B/S 224	543
Current	B/S 158	-
<b>Contingent consideration at December 31</b>	<b>382</b>	<b>543</b>

### PrecisionBiotics Group

The purchase agreement for PrecisionBiotics Group includes a contingent consideration of up to DKK 298 million.

The consideration is contingent on the achievement of sales targets for 2023 and recognized at the anticipated fair value of DKK 224 million (2021: DKK 211 million). Fair value is assessed by using the earn-out from the most probable sales in 2023 discounted at a rate of 7% (2021: 7%).

An interest expense of DKK 14 million has been recognized in Financial costs (2021: DKK 22 million). The contingent liability related to PrecisionBiotics Group is denominated in EUR.

In 2021, the most probable sales and EBITDA were reassessed, which led to an increase in the fair value at the acquisition date of DKK 44 million in contingent consideration and goodwill.

Invested capital

## 3.6 Contingent consideration (continued)

### Microbiome Labs

The purchase agreement of Microbiome Labs includes a contingent consideration of up to DKK 941 million.

The consideration is contingent on the achievement of sales targets for 2022 and is recognized at the anticipated fair value of DKK 158 million (2021: DKK 332 million). Based on lower-than-expected realized sales in 2022, Management reassessed the value of the earn-out and reduced the contingent consideration by DKK 223 million (2021: DKK 62 million).

The fair value adjustment was partly offset by interest and currency translation adjustments. Management's long-term expectations to

Microbiome Labs remain intact. The fair value adjustments have been recognized in Financial income.

Fair value is assessed by using the earn-out from the realized sales in 2022 discounted at a rate of 8% (2021: 8%). An interest expense of DKK 29 million has been recognized in financial costs (2021: DKK 28 million).

The contingent liability related to Microbiome Labs is denominated in USD and increased by DKK 20 million due to currency translation adjustments (2021: DKK 28 million).

### Accounting policies

Contingent consideration is remeasured at fair value at each reporting date.

Interest and fair value adjustments resulting from events after the acquisition date are recognized in Financial income or Financial costs.

### Critical accounting estimates and judgments

Fair value of contingent consideration is based on non-observable data (level 3 input) that requires Management to make estimates and use assumptions. Estimates are based on updated information from after the initial recognition of the liability, such as budgets, sales forecasts, discount rates etc. The fair value of

the contingent consideration is calculated as the present value of the most probable redemption amount using the discounted cash flow method. The determined fair value is associated with uncertainty and may be subject to subsequent adjustments.

Note 4

# Net working capital

4.1 Inventories

4.2 Trade receivables and contract assets

4.3 Other receivables

4.4 Other liabilities

Net working capital  
as % of sales on par  
with 2021 at

24%

Average net working capital  
up from 3,218 DKK million in  
2021 to DKK million

3,890

Inventories increased  
from DKK 2,992 million  
in 2021 to DKK million

3,803

Net working capital

## 4.1 Inventories

DKK million	2022	2021
Raw materials and consumables	603	433
Work in progress	1,333	979
Finished goods	1,867	1,580
<b>Inventories at December 31</b>	<b>3,803</b>	<b>2,992</b>
	<small>B/S</small>	
Cost of materials, included under Cost of goods sold	4,770	3,411
Indirect production costs capitalized in inventories at December 31	1,053	971
Write-downs expensed during the year	102	79
Reversal of write-downs during the year*	44	57

\* Part of the reversal of write-downs is attributable to written-down inventory being reused in production.

### Critical accounting estimates and judgments

Work in progress and Finished goods are measured at cost, including indirect production costs. Indirect production costs are assessed on an ongoing basis to ensure reliable measurement of employee costs, capacity

utilization, cost drivers and other relevant factors. Changes in these parameters may have an impact on the gross margin and the overall valuation of Work in progress and Finished goods.

### Accounting policies

Inventories are measured at the lower of cost determined on a first-in first-out basis and net realizable value.

The cost of Work in progress and Finished goods comprises direct production costs such as raw materials and consumables, energy and labor directly attributable to production as well as indirect production costs such as employee costs, maintenance and depreciation of plants, etc.

If the expected selling price less any completion costs and costs to execute the sale (net realizable value) of inventories is lower than the carrying amount, inventories are written down to net realizable value.

Novozymes has entered into a few agreements where Novozymes supplies goods to a customer's premises but retains title to the inventory until the goods are consumed in the customer's production. Such goods are derecognized from inventories in the period when they are consumed in the customer's production.

Net working capital

## 4.2 Trade receivables and contract assets

DKK million	2022	2021
Trade receivables, gross	3,590	3,099
Allowances	(136)	(151)
<b>Trade receivables at December 31</b>	<b>3,454</b>	<b>2,948</b>
Aging of trade receivables, gross:		
Up to 30 days	3,350	2,886
Between 30 and 90 days	74	30
More than 90 days	166	183
<b>Trade receivables, gross, at December 31</b>	<b>3,590</b>	<b>3,099</b>
Changes in allowances for trade receivables:		
At January 1	151	163
Allowances during the year	51	30
Write-offs during the year	(35)	(3)
Reversed allowances	(31)	(39)
<b>Allowances at December 31</b>	<b>136</b>	<b>151</b>

### Critical accounting estimates and judgments

The allowance for expected credit losses for trade receivables and contract assets is based on historical credit loss experience combined with forward-looking information

on macroeconomic factors affecting the credit risk. The expected loss rates are updated at each reporting date.

The war in Russia/Ukraine has not led to significant losses on trade receivables or an increase in allowances.

### Trade receivables

Novozyymes has collateral of DKK 5 million (2021: DKK 3 million) held as security for trade receivables in selected countries.

### Contract assets

Contract assets amounted to DKK 151 million at December 31, 2022 (2021: DKK 40 million), and

mainly related to goods delivered but not invoiced, and estimated profit splits arising from partnerships that Novozymes has entered.

The contract assets are initially recognized as revenue when goods are delivered to the other contracting party. When invoiced, the contract assets are reclassified to trade receivables.

No allowance for expected credit losses had been made for contract assets at December 31, 2022 (2021: no allowance).

### Accounting policies

Trade receivables and contract assets are measured at amortized cost less allowance for lifetime expected credit losses.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and days past due. Furthermore, an allowance for lifetime expected credit losses for trade receivables is recognized on initial recognition.

For contract assets, the credit risk is based on an individual assessment.

Trade receivables and contract assets are written off when all possible options have been exhausted and there is no reasonable expectation of recovery.

The cost of allowances for expected credit losses and write-offs for trade receivables and contract assets are recognized in Sales and distribution costs.

Net working capital

## 4.3 Other receivables

DKK million	2022	2021
Deposits	32	32
Prepaid expenses	174	395
Other	186	131
<b>Other receivables at December 31</b>	<b>392</b>	<b>558</b>
Recognized in the balance sheet as follows:		
Non-current <span style="float: right;">B/S</span>	32	39
Current <span style="float: right;">B/S</span>	360	519
<b>Other receivables at December 31</b>	<b>392</b>	<b>558</b>

Prepaid expenses in 2021 included prepayments related to establishing the new production line in Blair, Nebraska, U.S.

## 4.4 Other liabilities

DKK million	2022	2021
Employee costs payable	672	641
Stock-based payment settled in cash	21	44
Deferred consideration	-	77
Other payables	727	490
<b>Other liabilities at December 31</b>	<b>1,420</b>	<b>1,252</b>
Recognized in the balance sheet as follows:		
Current <span style="float: right;">B/S</span>	1,420	1,252
<b>Other liabilities at December 31</b>	<b>1,420</b>	<b>1,252</b>



Note 5

# Capital structure and financing

- 5.1 Financial risk factors and risk management
- 5.2 Financial income and Financial costs
- 5.3 Other financial liabilities
- 5.4 Derivatives – hedge accounting
- 5.5 Common stock and treasury stock
- 5.6 Financial assets and liabilities by category

Novozymes bought back 1.1 million B shares under the stock buyback program at a value of DKK million

500

NIBD/EBITDA on par with 2021 at

1.0x

Return on equity up from 27.3% in 2021 to

28.6%

## 5.1 Financial risk factors and risk management

Due to the international nature of Novozymes' operations, our earnings and financial position are exposed to a number of financial risk factors. Financial risks are managed centrally for the entire Group. The Treasury Policy is approved by the Board of Directors and sets the limits for the various financial risks and the derivatives used to hedge risk. The Treasury Policy is adjusted on an ongoing basis and adapted to the market situation. It contains rules on which derivatives can be used for hedging, which counterparties can be used, and the risk profile that is to be applied.

### Currency risk

Currency risk arises due to imbalances between income and costs in each individual currency and because Novozymes has more assets than liabilities in foreign currencies in connection with global operations.

Hedging of currency risk is carried out in the currencies in which Novozymes has the largest exposures. Hedging is managed by entering into derivatives such as forward contracts, currency options and swaps. Loans and deposits in foreign currencies are also utilized for hedging purposes. Hedge effectiveness is assessed on a regular basis by comparing changes in the timing and value of the expected exposure in the relevant

currencies with the timing and value changes for the designated cash flow hedging transaction.

Where deemed appropriate, currency risk related to net investments in foreign subsidiaries is hedged by taking out loans and entering into swaps. Currently, there are no open transactions used to hedge equity investments.

### Foreign exchange sensitivity – 2022

The sensitivity analysis shows the impact on net profit and other comprehensive income of a 5% change in DKK versus the key currencies to which Novozymes was exposed on December 31, 2022. For other comprehensive income, the analysis shows the impact on currency translation of net investments and does not include the impact of cash flow hedges, as these relate to future commercial transactions.

The sensitivity analysis reflects transaction and translation risk, and assumes that exchange rates change on December 31, 2022, while all other variables remain constant. The table shows the effect of an increase in exchange rates. A decrease in the exchange rates would have the opposite effect.

### Foreign exchange sensitivity analysis

DKK million	Increase in exchange rates	2022		2021	
		Change in net profit	Change in other comprehensive income	Change in net profit	Change in other comprehensive income
INR	5.0%	4	51	4	57
CNY	5.0%	(5)	127	(1)	127
USD	5.0%	(3)	325	1	244
Other	5.0%	4	64	(6)	108
<b>Total</b>		<b>-</b>	<b>567</b>	<b>(2)</b>	<b>536</b>

### Foreign exchange sensitivity – 2023 estimate

Operating profit (EBIT) is exposed to exchange rate developments, as the effect of hedges is included in financial income/costs. EBIT is mainly exposed to USD and EUR. A movement of 5% in the USD/DKK exchange rate would result in a change in the expected EBIT for 2023 of around DKK 130-160 million (2022: DKK 130-160 million). A 5% movement in the EUR/DKK exchange rate would result in a change in expected EBIT for 2023 of around DKK 200 million (2022: DKK 200 million).

Of the expected USD cash flows for 2023, 88% has been hedged by forward contracts at an average rate of DKK 6.98. As a result, the impact on net profit from changes in the USD/DKK exchange rate has been reduced significantly compared with the impact on EBIT.

### Interest rate risk

Interest rate risk arises in relation to interest-bearing assets and liabilities. In accordance with Novozymes' Treasury Policy, a minimum of 30% of loans must be at fixed interest rates. Hedging of the interest rate risk is managed by entering into fixed-rate loans and interest rate swaps.

## 5.1 Financial risk factors and risk management (continued)

With the current hedging of interest rate risk, an increase of 1 percentage point in the average interest rate on Novozymes' net interest-bearing debt would have a negative effect on net profit of DKK 14 million (2021: negative effect of DKK 12 million). At December 31, 2022, 62% (2021: 62%) of the loan portfolio carried fixed interest rates.

### Credit risk

Credit risk arises especially on cash and cash equivalents, derivatives, trade receivables and contract assets. The credit risk on trade receivables is countered by thorough, regular analysis based on customer type, country and specific conditions. The credit risk on cash and cash equivalents as well as derivatives is mitigated by the Treasury Policy, which limits exposure solely to counterparties that have an investment-grade credit rating. The credit risk is calculated on the basis of net market values and is governed by the Treasury Policy. Novozymes has entered into netting agreements (ISDA or similar) with all the banks used for trading in financial instruments, which means that Novozymes' credit risk is limited to net assets. At December 31, 2022, the Group considered its maximum credit risk to be DKK 5,036 million (2021: DKK 4,219 million),

which is the total of the Group's financial assets. At December 31, 2022, the maximum credit risk related to one counterparty was DKK 386 million (2021: DKK 330 million).

### Liquidity risk

In connection with the Group's ongoing financing of operations, including refinancing, efforts are made to ensure adequate and flexible liquidity. This is guaranteed by using committed credit facilities and placing free funds in deposits, government bonds or ultra-liquid mortgage bonds in accordance with the Treasury Policy.

At December 31, 2022, Novozymes' financial resources amounted to DKK 18,543 million (2021: DKK 4,748 million), consisting of net cash, cash equivalents, and undrawn committed credit facilities of DKK 17,502 million, which expire in 2023–2027. The increase in undrawn committed credit facilities compared to 2021 is related to the facility obtained to refinance existing debt following completion of the proposed combination of Novozymes and Chr. Hansen.

With the exception of debt to credit institutions, the maturity dates are primarily within one year.

### Capital structure

Novozymes favors a conservative balance which is reflected by a target for net interest-bearing debt of around 1x EBITDA. At December 31, 2022, the ratio was 1.0 and thus the target is considered as met in 2022. The capital structure is mainly managed using two instruments: 1) Dividend payments where Novozymes aims for a payout ratio of around 50%. For 2022, the payout ratio is expected to be 45.0%\*, which is in line with the communicated target. 2) Stock buy-backs, where a program for DKK 500 million was executed in 2022.

\*Adjusted for non-recurring items with no cash flow impact related to 21<sup>st</sup>.BIO and the Microbiome Labs earnout, the payout ratio is 50.9%.

## 5.2 Financial income and Financial costs

DKK million	2022	2021
Interest income	18	18
Fair value adjustments of contingent consideration	223	62
Gains on cash flow hedges	-	31
Gains on fair value hedges	-	63
Gain on divestment of minority ownership in Albugenix	267	-
Fair value adjustments of cash-settled stock options	25	-
<b>Financial income</b>	<b>533</b>	<b>174</b>
Interest costs	(40)	(31)
Interest on lease liabilities	(19)	(21)
Interest on contingent consideration	(43)	(50)
Losses on cash flow hedges	(295)	-
Losses on fair value hedges	(20)	-
Other financial costs	(99)	(20)
Other foreign exchange losses, net	(15)	(98)
Fair value adjustments of cash-settled stock options	-	(33)
<b>Financial costs</b>	<b>(531)</b>	<b>(253)</b>
<b>Financial income/(costs), net</b>	<b>2</b>	<b>(79)</b>

Novozymes has divested its minority share of Albugenix, a company built with Novozymes' technology platform. The sale resulted in a financial gain of DKK 267 million.

Increase in Other financial costs are mainly costs for the refinancing facility related to the proposed combination of Novozymes and Chr. Hansen.

### Accounting policies

Financial income and Financial costs comprise interest income and interest costs, realized and unrealized foreign exchange gains and losses, gains and losses on other financial assets, as well as fair value adjustments of cash-settled stock-based incentive programs and contingent consideration, which are offset against Other liabilities and fair value adjustments of Other financial assets.

Interest income and Interest costs are measured at amortized cost for financial assets and liabilities.

Financial income and Financial costs also include fair value adjustments of derivatives used to hedge assets and liabilities, and income and costs relating to cash flow hedges that are transferred from Other comprehensive income on realization of the hedged item.

## Capital structure and financing

## 5.3 Other financial liabilities

DKK million	2022	2021
Credit institutions	6,437	5,706
Derivatives	101	113
<b>Other financial liabilities at December 31</b>	<b>6,538</b>	<b>5,819</b>
Recognized in the balance sheet as follows:		
Non-current	3,619	3,680
Current	2,919	2,139
<b>Other financial liabilities at December 31</b>	<b>6,538</b>	<b>5,819</b>

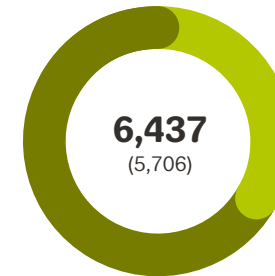
DKK million	2022			2021		
	Credit institutions	Lease liabilities	Total	Credit institutions	Lease liabilities	Total
Liabilities from financing activities at January 1	5,706	482	6,188	4,350	522	4,872
Financing cash flows	731	(120)	611	1,174	(103)	1,071
Currency translation adjustments	-	10	10	2	18	20
Other changes*	-	39	39	180	45	225
<b>Total liabilities from financing activities at December 31</b>	<b>6,437</b>	<b>411</b>	<b>6,848</b>	<b>5,706</b>	<b>482</b>	<b>6,188</b>

\* Other changes include changes in lease liabilities from new or terminated leases and accrued interest expenses which will be presented as operating cash flows in the statement of cash flows when paid. In 2021, Other changes included the change in category of the transitional holiday accrual (Denmark).

### Credit institutions - currency 2022 (2021)

DKK million

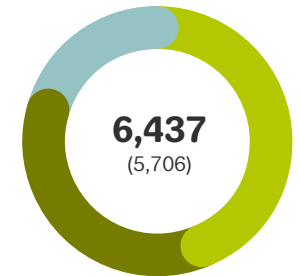
- EUR  
2,147 (2,273)
- DKK  
4,290 (3,433)



### Credit institutions - time to maturity 2022 (2021)

DKK million

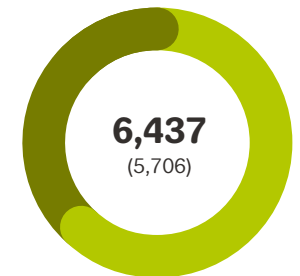
- Less than 1 year  
2,818 (2,029)
- Between 1 and 5 years  
2,301 (2,424)
- More than 5 years  
1,318 (1,253)



### Loan portfolio - fixed or floating interest rate 2022 (2021)

DKK million

- Fixed interest rate  
3,979 (3,540)
- Floating interest rate  
2,458 (2,166)



## 5.4 Derivatives – hedge accounting

DKK million	2022		2021	
	Contract amount based on agreed rates*	Fair value	Contract amount based on agreed rates*	Fair value
<b>Forward exchange contracts</b>				
CNH	(618)	(13)	(516)	43
BRL	165	2	122	1
USD	(228)	(20)	66	-
INR	374	23	227	(9)
Other	21	1	(985)	25
<b>Fair value hedges at December 31</b>	<b>(286)</b>	<b>(7)</b>	<b>(1,086)</b>	<b>60</b>

\* Positive contract amounts represent a sale of the respective currency, and negative amounts represent a purchase.

### Fair value hedges

The table above shows the derivatives the Group has contracted in order to hedge currency exposure on financial assets and liabilities that give rise to currency adjustments in the income statement.

The fair value hedges were 100% effective, as the loss on forward exchange contracts was DKK 20 million (2021: gain of DKK 63 million), compared with a gain on hedged items of DKK 20 million (2021: loss of DKK 63 million).

The forward exchange contracts mature in the period January 2023 to August 2023 (2021: January 2022 to July 2022).



## 5.4 Derivatives – hedge accounting (continued)

DKK million	2022		2021	
	Contract amount based on agreed rates	Fair value	Contract amount based on agreed rates	Fair value
<b>Forward exchange contracts*</b>				
USD	2,344	16	2,103	(99)
	<b>2,344</b>	<b>16</b>	<b>2,103</b>	<b>(99)</b>
<b>Interest rate swaps</b>				
DKK/DKK – pays fixed rate of (0.1075%) / earns variable rate of 2.42% (2021: (0.22%))	400	51	400	5
DKK/DKK – pays fixed rate of 0.595% / earns variable rate of 2.45% (2021: (0.1867%))	243	12	313	(4)
	<b>643</b>	<b>63</b>	<b>713</b>	<b>1</b>
<b>Forwards</b>				
Electricity price agreements – average payment of DKK 2,078 / MWh	85	(31)	-	-
	<b>85</b>	<b>(31)</b>	<b>-</b>	<b>-</b>
<b>Cash flow hedges at December 31</b>	<b>3,072</b>	<b>48</b>	<b>2,816</b>	<b>(98)</b>

\* Positive contract amounts represent a sale of the respective currency, and negative amounts represent a purchase.

### Cash flow hedges

The table above shows the derivatives the Group has contracted to hedge currency, interest rate and electricity price exposure in future cash flows.

The forward exchange contracts mature in the period January 2023 to December 2023 (2021: January 2022 to December 2022), the swaps mature in May 2026 and December 2026 (2021: May 2026 and December 2026) and the electricity price agreements mature in the period January 2023 to June 2023.

At the end of 2022, the Group had hedged 88% of expected future cash flows in USD for 2023 at an average rate of DKK 6.98 (2021: 88% of expected future cash flows in USD for 2022 at an average rate of DKK 6.26).

### Accounting policies

Hedge accounting consists of positive and negative fair values of derivatives, which are recognized in the balance sheet under Other financial assets and Other financial liabilities respectively. Derivatives are recognized at the transaction date.

Derivatives used for fair value hedges are measured at fair value at the reporting date, and value adjustments are recognized as Financial income or Financial costs. Derivatives used for cash flow hedges and hedges of net investments in subsidiaries are measured at fair value at the reporting date, and value adjustments are recognized in Other comprehensive income.

Income and costs relating to cash flow hedges and hedges of net investments in subsidiaries are transferred from Other comprehensive income. On realization, foreign exchange contracts and interest rate swaps are recognized as Financial income and Financial costs, and electricity price agreements covering production-related electricity are recognized as part of Cost of goods sold.

## Capital structure and financing

## 5.5 Common stock and treasury stock

DKK million	2022		2021	
	No.	Nominal value DKK million	No.	Nominal value DKK million
<b>Common stock</b>				
A common stock (shares of DKK 2)	53,743,600	107	53,743,600	107
B common stock (shares of DKK 2)	227,256,400	455	228,256,400	457
<b>Common stock at December 31</b>	<b>281,000,000</b>	<b>562</b>	<b>282,000,000</b>	<b>564</b>
<b>Treasury stock - B stock</b>				
Treasury stock at January 1	4,894,362	10	5,674,598	11
Additions during the year	1,134,982	2	3,401,975	7
Disposals during the year	(628,333)	(1)	(1,182,211)	(2)
Cancellation of common stock	(1,000,000)	(2)	(3,000,000)	(6)
<b>Treasury stock at December 31</b>	<b>4,401,011</b>	<b>9</b>	<b>4,894,362</b>	<b>10</b>

No.	2022	2021
<b>Shares of common stock in circulation</b>		
Shares of stock at January 1	277,105,638	279,325,402
Purchase of treasury stock	(1,134,982)	(3,401,975)
Sale of treasury stock	628,333	1,182,211
<b>Shares of common stock in circulation at December 31</b>	<b>276,598,989</b>	<b>277,105,638</b>

Each A share entitles the holder to 20 votes, while each B share entitles the holder to two votes.

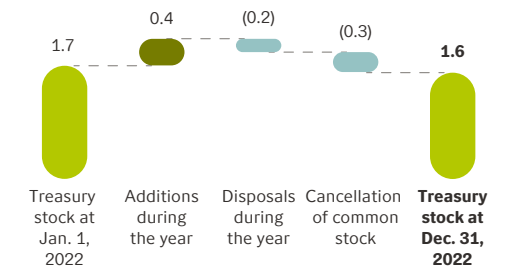
Each year, the Board of Directors assesses whether the ownership structure with A and B common stock is optimal. The Board of Directors continues to believe that this is the best way to safeguard Novozymes' long-term development to the benefit of the company's shareholders and other stakeholders.

Treasury stock is used to reduce the common stock and to hedge employees' exercise of granted stock awards and stock options.

In 2022, Novozymes canceled 1 million treasury shares, reducing the common stock to 281 million shares.

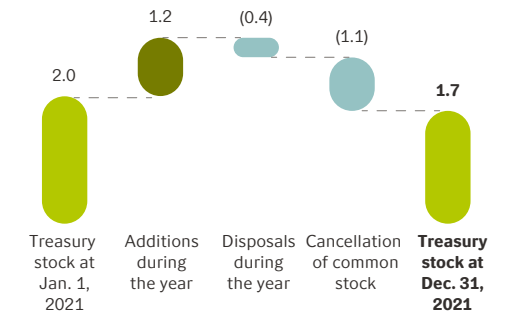
### Treasury stock 2022

% of common stock



### Treasury stock 2021

% of common stock



## 5.6 Financial assets and liabilities by category

DKK million	Note	2022	2021
Trade receivables	4.2	3,454	2,948
Contract assets	4.2	151	40
Other receivables, excl. prepaid expenses	4.3	218	163
Cash and cash equivalents		1,041	963
<b>Financial assets at amortized cost</b>		<b>4,864</b>	<b>4,114</b>
Derivatives		28	70
Other financial assets		30	30
<b>Fair value through profit and loss</b>		<b>58</b>	<b>100</b>
Derivatives		114	5
<b>Fair value through other comprehensive income</b>		<b>114</b>	<b>5</b>
<b>Financial assets</b>		<b>5,036</b>	<b>4,219</b>

### Fair value hierarchy

Novozymes has no financial instruments measured at fair value on the basis of quoted prices (level 1 input).

For financial assets and financial liabilities measured at amortized cost (level 2 input), the carrying amounts approximate fair value. Derivatives are measured at fair value based on observable data (level 2 input). The derivatives are not traded in an active market based on quoted

prices but on individual contracts. The fair value of these assets is determined using valuation techniques that utilize market-based data such as exchange rates, interest rates, credit risk, electricity prices and volatilities.

Other financial assets, contingent considerations and share purchase liability are measured at fair value based on non-observable data (level 3 input). Reference is made to Notes 3.6 and 6.5 for a description of their fair value measurement.

DKK million	Note	2022	2021
Lease liabilities	5.3	(411)	(482)
Credit institutions	5.3	(6,437)	(5,706)
Trade payables		(1,869)	(1,490)
Other payables, incl. deferred consideration	4.4	(727)	(567)
<b>Financial liabilities at amortized cost</b>		<b>(9,444)</b>	<b>(8,245)</b>
Derivatives	5.3	(35)	(10)
Contingent consideration	3.6	(382)	(543)
<b>Fair value through profit and loss</b>		<b>(417)</b>	<b>(553)</b>
Derivatives	5.3	(66)	(103)
<b>Fair value through other comprehensive income</b>		<b>(66)</b>	<b>(103)</b>
Share purchase liability	6.5	(760)	(717)
<b>Fair value through equity</b>		<b>(760)</b>	<b>(717)</b>
<b>Financial liabilities</b>		<b>(10,687)</b>	<b>(9,618)</b>

Note 6

# Other financial notes

- 6.1 Management remuneration
- 6.2 Stock-based payment
- 6.3 Commitments and contingencies
- 6.4 Related party transactions
- 6.5 Non-controlling interests
- 6.6 Fees to statutory auditors
- 6.7 Cash flow
- 6.8 Events after the reporting date
- 6.9 Group companies

Grant date fair value of options granted in 2022 in DKK million

92

Realized Group audit fee ratio during 2022

1.4

No. of Danish and foreign subsidiaries in the Group

51

Other financial notes

## 6.1 Management remuneration

DKK million	2022				2021			
	Executive Leadership Team			Total	Executive Leadership Team			Total
	Board of Directors	Registered executives	Non-registered executives		Board of Directors	Registered executives	Non-registered executives	
Salaries and other short-term benefits	10	15	32	57	10	17	27	54
Defined contribution plans	-	2	3	5	-	2	3	5
Cash bonus	-	11	18	29	-	11	17	28
Expensed stock-based incentive programs	-	16	25	41	-	8	14	22
<b>Remuneration</b>	<b>10</b>	<b>44</b>	<b>78</b>	<b>132</b>	<b>10</b>	<b>38</b>	<b>61</b>	<b>109</b>
Compensation for lost incentives		8	2	10		6	3	9
<b>Remuneration including additional payments</b>	<b>10</b>	<b>52</b>	<b>80</b>	<b>142</b>	<b>10</b>	<b>44</b>	<b>64</b>	<b>118</b>
No. of members at December 31	11	2	6		11	2	6	

General guidelines for the remuneration of the Board of Directors and the Executive Leadership Team of Novozymes A/S, as assessed by the Board of Directors in accordance with the recommendations of the Nomination and Remuneration Committee, are approved at the Annual Shareholders' Meeting.

A summary of the Management remuneration can be found in the Governance section of The Novozymes Report.

### Executive Leadership Team

Members of the Executive Leadership Team receive fixed remuneration comprising a base salary, pension, and benefits. Further, significant proportions of their remuneration packages are based on performance-related pay through short and long-term incentives. Most of the variable remuneration is weighted towards the long-term, in line with Novozymes' strategic focus and mirroring the long-term nature of Novozymes' investments in the business.

The short and long-term incentive programs are designed to incentivize performance against selected financial, environmental, social and operational key performance indicators and individual objectives, which are directly linked to Novozymes' strategy, and to incentivize long-term value creation and alignment with the long-term interests of shareholders, customers and other stakeholders. The annual cash bonus cannot exceed 9.5 months' fixed base salary, of which 65% is expected to be payable at target

performance. The stock-based incentive programs are described in Note 6.2.

Members of the Executive Leadership Team have contracts of employment containing standard conditions for executives of Danish listed companies, including the periods of notice that both parties are required to give, and noncompetition clauses. If an executive officer's contract of employment is terminated by the company without any misconduct on the part of the executive officer, the executive officer has a notice period of 12 months. In addition to the notice period, the executive officer has a right to termination compensation of 12 months' base salary and pension contributions.

### Board of Directors

The remuneration of the Board of Directors comprises a fixed fee and is not based on incentives.

## 6.2 Stock-based payment

### New programs

Novozymes has established stock-based incentive programs for the Executive Leadership Team, vice presidents, directors, and other employees. The purpose of these programs is to ensure an alignment of interests of the Management, employees and shareholders. Allocation of programs has been, and remains, dependent on profit, value creation and, in some cases, sustainability targets being achieved, and are made based on individual base salary. The exercise price and the share price of a stock option are identical at the date of grant. In order to exercise the options, the employees must still be employed at the exercise date. This does not apply to persons who have retired, taken voluntary early retirement or been given notice.

In 2020, Novozymes introduced annual long-term incentive-based program grants with overlapping three-year performance periods, and so in 2022 a new incentive program for the Executive Leadership Team was established, covering the performance period 2022–2024. The program is a combination of stock options and stock, with half of the incentive program allocated in stock options and half in stock. The total number of stock options and stock achievable is divided into two categories: ‘target stock options and target stock’

and ‘extra stock options and extra stock’. The target stock options, and target stock correspond to 65% of the maximum stock options and stock, and extra stock options and extra stock correspond to 35% of the maximum stock options and stock. The targets have 40% weight on organic sales growth, 20% weight on EBIT margin, 20% weight on ROIC, and 20% weight on nonfinancial targets. The nonfinancial targets are measured in relation to Climate, water & waste, workplace and diversity. Each of the nonfinancial targets carries a weight of 5%. The performance targets are as protocolled in the minutes of the board meeting approving the annual group financial statement for the year prior to the performance period.

- If Novozymes reaches the targets for 2022–2024 for organic sales growth, EBIT margin and ROIC in line with business plans and long-term aspiration and on all four measures for the nonfinancial targets, then the target stock options and the target stock will be granted.
- If Novozymes manages to outperform the targets, some or all of the extra stock options and extra stock may be granted.
- If Novozymes does not meet the targets for 2022–2024 or if Novozymes is significantly below the targets on one or more of the four

nonfinancial targets, then none or only part of the target stock options and the target stock will be granted.

The program contains a maximum-value clause, allowing the Board of Directors to choose to limit the total allocation of stock options and stock if the intrinsic value of the program exceeds twice the annual conditional grant.

The total target-level fair value of the program at the date of grant was approximately DKK 40 million. The value of the stock will be expensed over the three-year qualifying period (2022–2024) and will be released in 2025. The stock options have a vesting period of four years, followed by an exercise period of five years. The fair value of the stock options will be expensed over the four-year vesting period.

A new program was also established in 2022 for vice presidents and directors covering the performance period 2022–2024 (206 vice presidents and directors). The total target level fair value at grant date was approximately DKK 50 million and based on the same requirements and targets as for the Executive Leadership Team. The program is a combination of stock options and stock, with half of the incentive program allocated in stock

and half in stock options. The stock options have a four-year vesting period, while the stock will be released in 2025.

The program contains a maximum-value clause, allowing the Executive Leadership Team to choose to limit the total allocation of stock and stock options if the intrinsic value of the program exceeds twice the annual conditional grant.

For other employees, a new stock option-based incentive program was also established in 2022 covering the performance period 2022–2024. The employee program follows the same requirements and targets as the program for the Executive Leadership Team and the program for vice presidents and directors.

The Executive Leadership Team and other senior management, who are already included in an existing incentive program, are excluded from this new program. The awarded stock options have a vesting period of four years, followed by an exercise period of five years. The target level value of the program is approximately DKK 40 million.

## 6.2 Stock-based payment (continued)

### Finally awarded programs

Awards in the programs covering the performance period 2020–2022 were finalized in 2022. The targets for sales growth and economic profit was adjusted in 2021 to exclude 2020 performance due to the extraordinary impact from COVID-19, and the allocations related to these targets were reduced by one third. For more information, see the description in the Novozymes Remuneration Report 2021.

The accumulated economic profit generated in the two-year period (2021–2022) was DKK 4.6 billion, resulting in 100% of the economic profit pool (26.5% of the total program) being awarded.

Average organic sales growth during the two-year period was 7.5%, resulting in 100% of the sales growth pool (26.5% of the total program). 80% of the sustainability targets were reached (20% of the total program). In total, 69% of the original maximum of the program is being awarded.

For the Executive Leadership Team, this means that a total of 45,085 shares will be released in January 2023. The number of stock options granted over the three-year period is 328,763 reflecting the realized target achievement. The program contains a maximum-value clause, allowing the Board of Directors to choose to limit the

total allocation of stock and stock options if the intrinsic value exceeds twice the annual conditional grant at the end of the program. There will be no limitation on the total allocation, as the intrinsic value is DKK 16 million.

The program for vice presidents and directors follows the same requirements and targets as the program for the Executive Leadership Team. The final number of shares allocated under this program to be released in January 2023 is 60,768. The number of stock options granted over the three-year period is 442,539, reflecting the realized target achievement of 69%.

Awards in the program for other employees covering the performance period 2020–2022 were also finalized in 2022. The number of stock options granted over the three-year period is 785,811, reflecting the realized target achievement of 69%.



Other financial notes

## 6.2 Stock-based payment (continued)

### Stock options

The number of outstanding options (excl. stock awards) has developed as follows:

	Number of options				DKK		DKK million
	Executive Leadership Team	Vice presidents and directors	Other employees	Total	Avg. exercise price per option	Grant date fair value per option	Grant date fair value total
Outstanding at January 1, 2022	899,295	3,761,733	2,349,300	7,010,328	312		
Granted <sup>1</sup>	235,877	318,779	557,898	1,112,554	416	82	92
Allocation adjustment <sup>2</sup>	19,063	19,439	32,382	70,884	351	48	3
Exercised <sup>3</sup>	-	(414,669)	(222,654)	(637,323)	264		
Forfeited	-	(98,188)	(165,200)	(263,388)	366		
Expired	-	(9,963)	(6,835)	(16,798)	275		
<b>Outstanding at December 31, 2022</b>	<b>1,154,235</b>	<b>3,577,131</b>	<b>2,544,891</b>	<b>7,276,257</b>	<b>331</b>		
Outstanding at January 1, 2021	997,511	4,091,106	2,054,654	7,143,271	289		
Change in Management	(188,638)	188,638	-	-			
Granted <sup>4</sup>	266,279	371,321	617,963	1,255,563	385	68	85
Exercised <sup>2</sup>	(175,857)	(811,215)	(242,860)	(1,229,932)	253		
Forfeited	-	(78,117)	(75,869)	(153,986)	335		
Expired	-	-	(4,588)	(4,588)	272		
<b>Outstanding at December 31, 2021</b>	<b>899,295</b>	<b>3,761,733</b>	<b>2,349,300</b>	<b>7,010,328</b>	<b>312</b>		
Number of exercisable options at December 31, 2022				2,534,562	278		
Number of exercisable options at December 31, 2021				2,493,268	268		

1. The allocation of stock options for 2022–2024 will be adjusted in January 2025 based on the cumulative level of target achievement for the period.

2. The allocation of stock options for 2020–2022 has been adjusted based on the realized level of target achievement for the period (69%).

3. The weighted average share price for stock options exercised during 2022 was DKK 433 (2021: DKK 448).

4. The allocation of stock options for 2021–2023 will be adjusted in January 2024 based on the cumulative level of target achievement for the period.

## 6.2 Stock-based payment (continued)

For stock options outstanding at December 31, 2022, the range of exercise prices is DKK 233-486 per option (2021: DKK 178-486 per option), and the weighted average remaining term to maturity is five years (2021: five years).

During 2022, DKK 127 million arising from stock-based payment was recognized in the income statement (2021: DKK 78 million), DKK 123 million of which was from equity-settled programs (2021: DKK 75 million) and DKK 4 million was from cash-settled programs (2021: DKK 3 million).

Most programs are equity settled, and no liability

is recognized for these. If allocations under the programs are made in countries where ownership of foreign stock is not permitted, the value of stock options is settled in cash instead, and a liability of DKK 21 million was recognized for this in 2022 (2021: DKK 44 million). The intrinsic value of exercisable cash-settled programs in 2022 was DKK 9 million (2021: DKK 61 million).

The fair value of employee services received is measured with reference to the fair value of the equity instruments granted. Fair value at grant date is measured in accordance with the Black-Scholes model, using the average exercise price, the option term and the following significant assumptions:

DKK million	Note	2022	2021
Expected future dividends per share	DKK	38.9	38.1
Volatility	%	25.9	25.3
Annual risk-free interest rate	%	0.3	(0.5)
Weighted average share price at grant date	DKK	416	385

Furthermore, the options are assumed to be exercised two years after expiry of the vesting period, on average, or at the option's expiry date if within one year. Volatility is estimated using

the historical volatility over the last three years. The risk-free interest rate is based on Danish government bonds with a maturity equivalent to the option's term to maturity.

### Stock awards

The stock allocated under the programs is used for stock awards. In 2022, 107,510 stock awards with a fair value of DKK 45 million were granted (2021: DKK 41 million) which will be expensed over the three-year period (2022–2024).

The total number of outstanding stock awards at December 31, 2022 was 314,029 (2021: 209,193).

The fair value of these at December 31, 2022 was DKK 111 million (2021: 112 million).

### Accounting policies

The Group has established stock-based incentive programs comprising equity-settled and cash-settled programs.

The fair value of the employee services received in exchange for the grant of stock options and stock awards is measured with reference to the fair value of the stock options and stock awards granted. The fair value is measured using the Black-Scholes option-pricing model.

The fair value of stock-based payment at the grant date is recognized as an employee cost over the period in which the stock options vest. In measuring the fair value, account is taken of the number of employees expected

to gain entitlement to the options as well as the number of options the employees are expected to gain. This estimate is adjusted at the end of each reporting period such that only the number of options to which employees are entitled or expected to be entitled is recognized.

The value of equity-settled programs is recognized in equity. The value of cash-settled programs, which are recognized as Other liabilities, is adjusted to fair value at the end of each reporting period, and the subsequent adjustment is recognized in the income statement under Financial income or Financial costs.

## 6.3 Commitments and contingencies

DKK million	2022	2021
<b>Other guarantees</b>		
Other guarantees and commitments to related companies	22	29
Other guarantees and commitments	606	332

### Pending litigation and arbitration

Novozymes is engaged in certain legal cases. The Board of Directors and Management believe that settlement or continuation of these cases will not have a significant effect on the Group's financial position. A liability is recognized under Provisions when the risk of a loss on a legal case is considered more likely than not.

### Contractual commitments

The increase in contractual commitments is related to the proposed combination of Novozymes and Chr. Hansen.

Contractual commitments to third parties relating to Property, plant and equipment are described in Note 3.2.

### Contingent liabilities

In the unlikely event that the proposed combination of Novozymes and Chr. Hansen does not obtain regulatory approval, Novozymes may have to pay a break-up fee of up to DKK 2,342 million (EUR 315 million).

### Contract conditions

Several of the partnership contracts to which Novozymes is a party may be terminated by the other party in the event of significant changes in ownership or control of Novozymes. Furthermore, a few contracts contain provisions that restrict Novozymes' licenses from using specific forms of technology in such situations.

## 6.4 Related party transactions

### Transactions

DKK million	2022	2021
<b>Novo Holdings A/S</b>		
Sale of services	-	1
Dividend payment to Novo Holdings A/S	396	382
<b>The Novo Nordisk Group</b>		
Sale of services	92	78
Sale of assets	21	6
Purchase of goods and materials	(29)	(80)
Purchase of services	(49)	(36)
<b>The NNIT Group</b>		
Purchase of services	(34)	(39)
<b>The Chr. Hansen Group</b>		
Sale of goods and materials	123	89
Purchase of goods and materials	-	(3)
<b>Microbiogen Pty. Ltd.*</b>		
Purchase of services	(38)	(25)
<b>21<sup>st</sup>. BIO A/S*</b>		
Sale of services	14	-
<b>MagnaBioAnalytics LLC*</b>		
Purchase of goods and materials	(1)	-
Purchase of services	(1)	-

\* Associate of Novozymes A/S

## 6.4 Related party transactions (continued)

### Outstanding balances

DKK million	2022	2021
<b>The Novo Nordisk Group</b>		
Receivables	10	10
Payables	(79)	(88)
<b>The NNIT Group</b>		
Payables	(7)	(9)
<b>The Chr. Hansen Group</b>		
Receivables	22	5
<b>Microbiogen Pty. Ltd.*</b>		
Payables	(12)	(7)
<b>21<sup>st</sup>. BIO A/S*</b>		
Receivables	2	-
<b>MagnaBioAnalytics LLC*</b>		
Receivables	5	-

\* Associate of Novozymes A/S

Novozyymes A/S is controlled by Novo Holdings A/S, domiciled in Hellerup, Denmark, which holds 72.7% of the votes in Novozymes A/S. The remaining stock is widely held. The ultimate parent of the Group is the Novo Nordisk Foundation (incorporated in Denmark).

Related parties are considered to be Novo Holdings A/S and the Novo Nordisk Foundation, as well as the Board of Directors and Executive Management of these entities together with their immediate families. Other related parties are considered to be the Novo Nordisk Foundation's subsidiaries and associates, such as the Novo Nordisk Group, the NNIT Group and the Chr. Hansen Group, associates of Novozymes A/S, as well as the Board of Directors and Executive Leadership Team of Novozymes A/S together with their immediate families. Related parties also include companies in which the above persons have control or joint control.

All agreements relating to these transactions are based on market price (arm's length). The majority of the agreements are renegotiated regularly.

In 2022, Novozymes has not sold or purchased any of its own B shares from Novo Holdings A/S. In 2021, Novozymes purchased from Novo Holdings A/S 765,000 of its own B shares with the approval of the Board of Directors, at a price of DKK 338 million. The transaction was based on the market price.

There were no transactions with related parties other than the transactions described and normal remuneration of the Board of Directors and Executive Leadership Team, which is presented in Note 6.1.

Rental commitments to related parties at December 31, 2022 amounted to DKK 12 million, compared with DKK 12 million at December 31, 2021.

In 2022, Novozymes Biotechnology ApS merged with 21<sup>st</sup>.BIO. As part of the merger, Novozymes received 40% of the shares in 21<sup>st</sup>.BIO, corresponding to the value of the intellectual property rights from Novozymes Biotechnology ApS of DKK 201 million.

## 6.5 Non-controlling interests

DKK million	2022	2021
Share purchase liability at January 1	717	-
Additions from business acquisitions	-	717
Currency translation adjustments	(32)	-
Interest	75	-
<b>Share purchase liability at December 31</b>	<b>760</b>	<b>717</b>

### Transactions with non-controlling interests

On December 10, 2021, Novozymes acquired 60% of the shares in Synergia Life Sciences, located in India.

The remaining 40% of the shares in Synergia Life Sciences are held by non-controlling interests and are recognized in the final opening balance at the proportionate share of the acquired net identifiable assets, which amounts to DKK 371 million. See details in Note 3.5.

### Share purchase liability

The remaining 40% of the shares in Synergia Life Sciences are to be acquired in 2025 and a liability of DKK 760 million (2021: DKK 717 million) is recognized.

The redemption amount is contingent on the achievement of sales targets for Synergia Life Sciences for the period April 1, 2024 to March 31, 2025.

The consideration will be within the range of DKK 623 million to DKK 1,121 million and includes payment of the non-controlling interests' stake of the net working capital and cash balances at the acquisition date of Synergia Life Sciences.

Fair value of the Share purchase liability is assessed by using the most probable redemption amount, discounted at a rate of 11% (2021: 11%).

Currency translation adjustments and interest of net DKK 43 million (2021: DKK 0 million) have been recognized in Equity. The share purchase liability is denominated in INR.

### Critical accounting estimates and judgments

Fair value of the share purchase liability is based on non-observable data (level 3 input) that requires Management to make estimates and use assumptions.

Estimates are based on updated information since the initial recognition of the liability, such as budgets, sales forecasts, discount

rates etc. The fair value of the share purchase liability is calculated as the present value of the most probable redemption amount using the discounted cash flow method. The determined fair value is associated with uncertainty and may be subject to subsequent adjustments.

### Accounting policies

Share purchase liability is Novozymes's obligation to purchase non-controlling interests in subsidiaries and is remeasured at fair value at each reporting date. The fair value of the most likely redemption amount is initially

recognized within liabilities with a corresponding charge directly to Equity. Interest and fair value adjustments resulting from events after the initial recognition are recognized in Equity under Retained earnings.

## 6.6 Fees to statutory auditors

DKK million	2022	2021
Statutory audit	9	9
Other assurance engagements	-	-
Tax assurance services	3	3
Other services	10	1
<b>Fees to statutory auditors</b>	<b>22</b>	<b>13</b>
Group audit fee ratio	1.4	0.4

### Audit fee policy

It is Novozymes' policy that the annual fee for nonaudit services provided by the statutory auditors should not exceed the annual fee for statutory audit services measured at Group level. The Group audit fee ratio may only exceed 1 with the approval of the Audit Committee.

In 2022, approval was given for advisory services and mandatory statements of DKK 9.6 million related to the proposed combination of Novozymes and Chr. Hansen.

In 2021 the group audit fee ratio was 0.4.

Implementation of the EU audit reform has led to restrictions on the nonaudit services that the auditors elected at the Annual Shareholders' Meeting may perform, including a 70% cap. The fee for nonaudit services performed for Novozymes by PricewaterhouseCoopers Statsautoriseret Revisionspartnerselskab was DKK 4 million (2021: DKK 1 million) and does not exceed the 70% cap. The services comprise tax advisory services concerning transfer pricing, advisory services related to the proposed combination of Novozymes and Chr. Hansen and other general financial reporting and tax consultancy. The fee for the mandatory statements related to the proposed combination of Novozymes and Chr. Hansen are by definition not a nonaudit service in relation to 70% cap calculation.

## 6.7 Cash flow

DKK million	Note	2022	2021
<b>Non-cash items</b>			
Accrued interest income and interest costs		146	34
(Gain)/loss on financial assets, etc., net		(248)	3
Depreciation, amortization and impairment losses	3.1, 3.2	1,485	1,416
Realized loss and allowances for doubtful trade receivables		15	(14)
(Gain)/loss on sale and disposal of assets		(25)	(92)
Unrealized foreign exchange (gain)/loss		70	73
Tax	2.7	870	779
Stock-based payment	6.2	127	78
Change in provisions		(44)	(26)
Divestment of a pharma-related royalty		-	(57)
Gain from 21 <sup>st</sup> .BIO transaction		(201)	-
Gain on divestment of minority ownership in Albumedix		(267)	-
Profit/loss in associates		7	4
<b>Non-cash items</b>		<b>1,935</b>	<b>2,198</b>

## Other financial notes

## 6.7 Cash flow (continued)

DKK million	Note	2022	2021
<b>Business acquisitions, divestments and purchases of financial assets</b>			
Divestment of minority ownership in Albumedix	5.2	267	-
Acquisition of Microbiome Labs	3.5	-	(761)
Acquisition of Synergia Life Sciences	3.5	(77)	(870)
<b>Cash flow from acquisitions, net</b>		<b>190</b>	<b>(1,631)</b>
Additions of intangible assets	3.1	130	169
<b>Purchase of intangible assets</b>		<b>130</b>	<b>169</b>
Additions of property, plant and equipment	3.2	2,802	1,188
Non-cash additions of property, plant and equipment		-	(15)
Less additions to lease assets	3.3	(42)	(102)
<b>Purchase of property, plant and equipment</b>		<b>2,760</b>	<b>1,071</b>

Undrawn committed credit facilities amounted to DKK 17,502 million at December 31, 2022 (2021: DKK 3,785 million), all of which expire in 2023–2027. The increase mainly relates to a significant facility related to the proposed combination of Novozymes and Chr. Hansen.

## Accounting policies

The consolidated statement of cash flows, which is compiled using the indirect method, shows cash flows from operating, investing and financing activities, and the Group's cash and cash equivalents at the beginning and end of the year.

Cash flow from operating activities comprises net profit adjusted for non-cash items, paid financial items, corporate income tax paid and change in working capital.

Cash flow from investing activities comprises payments relating to the acquisition and sale

of companies and non-controlling interests, intangible assets, and property, plant and equipment.

Cash flow from financing activities comprises proceeds from borrowings, repayment of principal on interest-bearing debt, repayment of lease liabilities, payment of dividends, proceeds from stock issues, and the sale of treasury stock and other securities.

Cash and cash equivalents comprises cash at bank and in hand less current bank loans due on demand.



Other financial notes

## 6.8 Events after the reporting date

No events of importance to the consolidated financial statements have occurred after the reporting date.

## 6.9 Group companies

- ISO 14001-certified sites. All major companies are ISO 9001 certified.
- Production
- Sales and marketing
- ◆ Research and development
- Holding companies, etc.

Parent Company	Activity	Percentage of shares owned
Novozyymes A/S, Denmark	■ □ ● ◆	
<b>Subsidiaries</b>		
Novozyymes BioAg S.A., Argentina	■ □ ● ◆	100
Novozyymes Australia Pty. Ltd.*, Australia	●	100
Novozyymes Belgium BV*, Belgium	●	100
Novozyymes Latin America Ltda.*, Brazil	■ □ ● ◆	100
Novozyymes BioAg Productos Para Agricultura Ltda., Brazil	□ ●	100
Novozyymes BioAg Limited, Canada	■ □ ● ◆	100

	Activity	Percentage of shares owned
Novozyymes Canada Limited, Canada	■ □ ●	100
Novozyymes (China) Biotechnology Co. Ltd., China	■ □ ●	100
Novozyymes (China) Investment Co. Ltd., China	● ◆	100
Novozyymes (Shenyang) Biologicals Co. Ltd., China	■ □ ●	100
Suzhou Hongda Enzyme Co. Ltd., China	■ □ ●	96
Novozyymes OneHealth Biotechnology (Shanghai) Co. Ltd., China	●	100
Novozyymes Bioindustrial A/S*, Denmark	○	100
Novozyymes Bioindustrial China A/S*, Denmark	○	100
Novozyymes Biopharma DK A/S*, Denmark	○	100
Novozyymes BioAg A/S*, Denmark	○	100
Novozyymes France S.A.S.*, France	●	100
Novozyymes Deutschland GmbH*, Germany	●	100
Novozyymes Berlin GmbH, Germany	◆	100
Novozyymes Greece Single Member SA*, Greece	●	100
Novozyymes Hong Kong Ltd., Hong Kong	○	100
Novozyymes South Asia Pvt. Ltd., India	■ □ ● ◆	100
Riata Life Sciences Pvt. Ltd., India	□ ● ◆	60
Synergia Life Sciences Pvt. Ltd.*, India	□ ● ◆	60
PT Novozymes Indonesia Biotechnology*, Indonesia	●	100
PrecisionBiotics Group Ltd.*, Ireland	● ◆	100
Novozyymes Italia S.r.l.*, Italy	●	100
Novozyymes Japan Ltd.*, Japan	● ◆	100
Novozyymes Kenya Ltd.*, Kenya	●	100
Novozyymes Malaysia Sdn. Bhd.*, Malaysia	●	100

Other financial notes

## 6.9 Group companies (continued)

	Activity	Percentage of shares owned
Novozymes Mexicana, S.A. de C.V.*, Mexico	●	100
Novozymes Mexico, S.A. de C.V., Mexico	●	100
Novozymes Nederland B.V.*, Netherlands	●	100
Novozymes RUS LLC*, Russia	○	100
Novozymes Singapore Pte. Ltd.*, Singapore	●	100
Novozymes South Africa (Pty) Ltd.*, South Africa	●	100
Novozymes Korea Limited*, South Korea	●	100
Novozymes Spain S.A.*, Spain	●	100
Novozymes Sweden AB*, Sweden	●	100
Novozymes Switzerland AG, Switzerland	●	100
Novozymes Switzerland Holding AG*, Switzerland	○	100
Novozymes (Thailand) Ltd.*, Thailand	●	100
Novozymes Enzim Dis Ticaret Ltd. Sirketi*, Turkey	●	100
Novozymes UK Ltd.*, U.K.	● ◆	100
Novozymes BioAg, Inc., U.S.	■ □ ●	100
Novozymes Biologicals, Inc., U.S.	■ □ ●	100
Novozymes Blair, Inc., U.S.	■ □	100
Novozymes, Inc., U.S.	◆	100
Physicians Exclusive LLC (d.b.a) Microbiome Labs, U.S.	● ◆	100
Novozymes North America, Inc., U.S.	■ □ ● ◆	100
Novozymes US, Inc.*, U.S.	○	100

	Activity	Percentage of shares owned
<b>Joint operations/associates</b>		
Grundejerforeningen Smørmosen*, Denmark		
Grundejerforeningen Hallas Park*, Denmark		
21 <sup>st</sup> .BIO A/S*, Denmark		42.70
Microbiogen PTY Ltd.*, Australia		23.10
Tecnol s.r.l. in liquidazione (formerly Beta Renewables S.p.A.)*, Italy		9.95
MagnaBioAnalytics LLC, U.S.		19.35

\* Owned directly by Novozymes A/S.

Note 7

# Environmental data

- 7.1 Climate change
- 7.2 Energy
- 7.3 Water
- 7.4 Waste
- 7.5 Environmental compliance
- 7.6 Bioethics & biodiversity
- 7.7 Product stewardship

## Mandatory statement on Corporate social responsibility, cf. section 99a in the Danish Financial Statements Act

The Notes on Environmental data and Social and Governance data forms the reporting required by section 99a in the Danish Financial Act.

Topic	Reference
Business model	Our business p 19-25
Content of commitments, management approach, targets, data, initiatives, and related progress on corporate social responsibility issues:	
Climate and environment	Notes on <a href="#">Environmental data</a>
Social matters	Notes on <a href="#">Social and Governance data</a>
Human rights	Note on <a href="#">Labor practices and Human rights</a>
Anti-corruption and bribery	Note on <a href="#">Business Ethics</a>

m<sup>3</sup> of water saved due to water efficiency projects

41,000

Renewable electricity share increased from 68% in 2021 to

82%

Increase in biomass recovered from 99% in 2021 to

100%

## Environmental data

## 7.1 Climate change

At Novozymes, we are fully committed to doing our part to accelerate towards a climate-neutral society. We actively invest to lower the carbon footprint of our operations and deliver low-carbon solutions to our customers. Our solutions play a key role in addressing many of the climate-related risks facing the world.

### Our approach

Novozymes is committed to the science-based targets and to reaching net-zero CO<sub>2</sub> emissions across our operations and value chain by 2050.

To deliver on our long-term ambition, we work with milestone targets. In 2022, we concluded our milestone target for 2022 to reduce emissions from our operations by 40% from a 2018 baseline, and we introduced two new milestone targets for 2025. By 2025, we aim to reduce absolute CO<sub>2</sub> emissions from operations by 65% from a 2018 baseline. In addition, we increase our level of ambition as to source 100% renewable electricity by 2025, five years earlier than previously communicated.

In 2021, in response to the latest climate science, we raised our ambition by committing to a 50% reduction of emissions from our

operations and supply chain (scopes 1+2+3) by 2030, which is the weighted average of a 75% reduction of emissions from our operations (scopes 1+2) and a 35% reduction from our supply chain (scope 3), from a 2018 baseline. In 2022, the Science Based Targets initiative (SBTi) re-validated our 2030 emissions reduction targets and our 2025 renewable electricity targets. In addition, Novozymes was among the first companies in the world to receive validation of our net-zero targets by SBTi.

Further information on our science-based target and net-zero roadmap is available in the Targets & Outlook section of this report.

We are committed to improve our climate data quality and transparency. We conduct peer-reviewed cradle-to-grave life cycle assessment (LCA) studies to document the environmental impact of our solutions. These studies are used to keep our stakeholders informed and to demonstrate to our customers ways to reduce their CO<sub>2</sub> emissions and leverage the positive impact on climate change that Novozymes' solutions can enable. Our published LCAs are available on our website.

We disclose our climate change impacts through CDP every year, and in 2022, Novozymes was recognized in CDP's Climate Change A List (leadership ranking) for our commitment to environmental transparency and climate action.

### 2022 summary

In 2022, the CO<sub>2</sub> emissions from our operations (scopes 1 + 2) decreased by 26% to 161,000 tonnes from 218,000 tonnes in 2021. These reductions were mainly driven by our continued focus on energy efficiency and increased sourcing of renewable electricity.

CO <sub>2</sub> -equivalent emissions 1,000 tonnes	2022	2021
Natural gas	40	38
Gas oil, light fuel oil and diesel oil	4	3
HCFCs	2	2
<b>Scope 1</b>	<b>46</b>	<b>43</b>
District heat	1	1
Electricity	50	112
Steam	64	62
<b>Scope 2 (market-based)</b>	<b>115</b>	<b>175</b>
<b>Scope 1 and 2, total</b>	<b>161</b>	<b>218</b>

Market-based vs. location-based scope 2 emissions 1,000 tonnes	2022	2021
Scope 2 CO <sub>2</sub> emissions (market-based)	115	175
Scope 2 CO <sub>2</sub> emissions (location-based)	332	316

2021 is restated due to full implementation of IEA CO<sub>2</sub> emission factors in U.S. and Scope 3 emissions are no longer included in this table.

Environmental data

# 7.1 Climate change (continued)

The major contributor was Novozymes' production site in Hongda, China, for which we in 2022 procured green electricity via RECs resulting in a reduction of approximately 65,000 tonnes of CO<sub>2</sub>.

In addition, we reduced our absolute emissions from our operations (scopes 1 + 2) by 63% relative to our 2018 baseline and thereby achieved our 2022 milestone target of reducing absolute

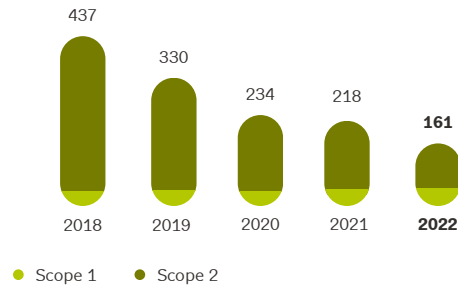
CO<sub>2</sub> emissions from our operations by 40%. In 2022, our bioenergy solutions helped the transport sector potentially save 65 million tonnes of CO<sub>2</sub> emissions in 2022 by enabling the production of low-carbon fuels.

Moving forward, we will accelerate our decarbonization efforts by executing our journey to net-zero, as described in the "Targets & outlook" section of this report.

We will invest in renewable energy, production efficiency and energy recovery opportunities. We will expand our collaboration with suppliers towards meaningful and actionable engagements to decarbonize our common value chain. We will continue taking the global stage and advocating for change, and collaborating with our customers, policymakers and partners to drive market transformation.

### Five-year operational emissions (CO<sub>2</sub>-eqv.)

1,000 tonnes



### Accounting policies

Reported CO<sub>2</sub> emissions comprise scope 1 and scope 2.

CO<sub>2</sub> from internally generated energy (scope 1) is calculated based on the amount of fuel consumed using local emission factors.

CO<sub>2</sub> from externally generated energy (scope 2) is reported in accordance with both the market-based and the location-based methods, as defined by the Greenhouse Gas (GHG) Protocol. The marked-based method assumes zero CO<sub>2</sub> emissions from the sourced

renewable energy and uses CO<sub>2</sub> factors from the International Energy Agency (IEA) for non-renewable energy. The location-based method uses third party validated CO<sub>2</sub> factors or CO<sub>2</sub> factors from IEA.

The environmental impact potentials for global warming and ozone layer depletion are calculated on the basis of data published by the U.S. Environmental Protection Agency (EPA) and the Montreal Protocol published by the United Nations Environment Programme(UNEP).



## Environmental data

## 7.2 Energy

Novozymes is committed to a net-zero future and energy is an integral part of achieving this commitment. For its operations, Novozymes relies on electricity, heat and steam. Many of our biosolutions enable downstream users to save energy in certain applications compared with conventional methods, such as in detergents and textile applications.

### Our approach

We manage energy in our operations through a two-pronged approach: increasing the sourcing of renewable energy and reducing energy demand in production by implementing optimization or energy-saving projects. Relevant targets drive our performance in these areas.

All energy efficiency and renewable energy sourcing efforts are managed and monitored by our Operations, Supply and Quality function. In addition to the internal energy savings, Novozymes focuses on recovering energy from waste to use in operations and to distribute to our local communities.

In 2022, we advanced our ambition to source 100% renewable electricity by 2025, five years

earlier than previously communicated. This target has been re-validated by the Science Based Target initiative (SBTi) and is in accordance with the best practice guidance defined by the RE100 initiative. We take a holistic approach in our end-to-end sourcing process, ensuring high quality and impactful projects for local communities, and we strive to purchase from the best electricity projects available.

Further information on our net-zero roadmap and our science-based targets is available in the Targets & Outlook section of this report.

### 2022 summary

In 2022, our organic sales growth was recorded at 9%, while energy consumption increased by 3%, compared to 2021, an indication of the success of our energy-savings efforts.

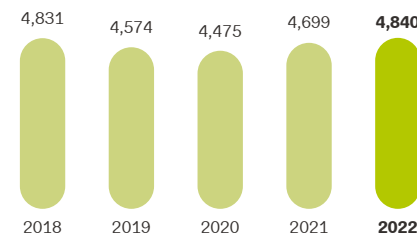
In 2022, projects driving process optimization and energy efficiency, such as heat recovery from compressors, automation and optimization of chiller operations undertaken at our sites resulted in energy savings of approximately 31,000 GJ.

### Energy consumption by primary source 1,000 GJ

	2022	2021
Natural gas	762	717
Biogas	30	20
Gas oil, light fuel oil and diesel oil	39	29
<b>Internally generated energy, total</b>	<b>831</b>	<b>766</b>
Electricity – conventional	506	861
Electricity – renewable	2,264	1,800
District heat - conventional	56	77
District heat - renewable	141	141
Steam	1,042	1,054
<b>Externally purchased energy, total</b>	<b>4,009</b>	<b>3,933</b>
<b>Energy consumption, total</b>	<b>4,840</b>	<b>4,699</b>
Energy production from waste	66	76

### Five-year energy consumption

1,000 GJ



## Environmental data

## 7.2 Energy (continued)

The share of renewables in our total energy consumption increased to 50% from 42% in 2021. Electricity accounts for more than half of the total energy consumed, and 82% of the electricity came from renewable sources, compared to 68% in 2021. The major contributor of this improvement was Novozymes' production site in Hongda, China, which began to procure green electricity in 2022, converting approximately 400,000 GJ from conventional to renewable electricity.

### Renewable electricity sources 2022 (2021)

- Wind power  
**42%** (52%)
- Solar  
**20%** (25%)
- Hydro  
**3%** (4%)
- Biomass  
**35%** (19%)



In Kalundborg, Denmark, we announced a collaboration with Novo Nordisk and Kalundborg Forsyning (Utility) to invest in a new district cooling system that uses ocean water. It also has the ambition to use the excess heat collected to supply renewable heating to households in both Kalundborg and Holbæk municipalities. When a distribution solution is found, it could potentially contribute significantly to the green transition in Denmark.

As a consequence of the war in Ukraine, the supply of natural gas has become subject to uncertainty. To mitigate this risk, production plants in Denmark that use natural gas as fuel have been equipped with flex burners, which makes it possible to change to fuel oil if gas supply is temporarily reduced or stopped.

Over the next three years, we will seek to implement our strong portfolio of projects to further invest in renewable electricity, to find cleaner alternatives for natural gas and coal-based steam and to save and recover energy.

### Accounting policies

Energy consumption includes quantities consumed both in the production process and in other areas.

Internally generated energy is measured as fuel consumption converted to energy based on the lower of combustion value and weight by volume, except in the U.S., where legal requirements for reporting CO<sub>2</sub> state that the higher of combustion value and weight by volume is to be applied. Fuel consumption comprises all types of fuel used to produce electricity, heat and steam on site and is converted to energy using factors supplied by utility providers or local authorities. Fuel for transportation is not included.

Externally generated energy is the input to Novozymes of externally generated electricity, heat and steam.

Energy produced from waste or wastewater is renewable and corresponds to the total energy (heat, electricity or steam) produced by an internal or external utility provider. An example is energy produced from biomass waste or biogas.

Reported quantities are based on meter readings, with the exception of steam, which may be subject to calculation.

The renewable energy percentage is calculated by dividing renewable energy consumed by total energy consumption. Renewable energy used at Novozymes sites comprises energy generated from natural processes and continuously replenished. Sources include solar, wind and hydropower-based electricity and energy from biogas and biomass.

District heat - renewable is primarily generated from biomass.



Environmental data

# 7.3 Water

Water stewardship is essential for Novozymes. The production, development and processing of our solutions depends on availability of water. We not only use water as a coolant, solvent and cleaning agent, but also as a component of our final products. Additionally, many of the raw materials required in our operations are agriculture-based and depend on water for production.

Many of our biosolutions in textile, brewing, household care and grain & starch processing enable customers to reduce their water consumption compared with conventional methods, while improving efficiency, wastewater quality and reducing dependence on hazardous chemicals.

### Our approach

Our approach towards water stewardship is driven by science and our ambition to manage water in balance with local conditions at all our sites. To deliver on this ambition, we concluded our milestone target for 2022 to establish contextual water management programs for all sites\*. We also introduced three new long-term commitments and two milestone targets for 2025. We aim to improve freshwater withdrawal by recycling 10% more water by 2025, 15% more water by 2030 and 20% more water by 2035

\* The targets do not include sites with activities not considered to have a significant environmental impact, e.g. sales offices, R&D labs, etc.

from a 2021 baseline. In addition, in basins close to our production sites where Water, Sanitization and Hygiene (WASH) is a challenge, we aim to restore 10 billion liters of water by 2025 and 30 billion liters by 2030 from a 2021 baseline.

For our operations, we seek to reduce dependence on freshwater by implementing recycling and water efficiency projects, while ensuring compliance with local regulations. We drive projects that also address site-specific challenges including scarcity, quality and changing regulation. Our wastewater is biologically treated internally or externally before being discharged or recycled after secondary filtration.

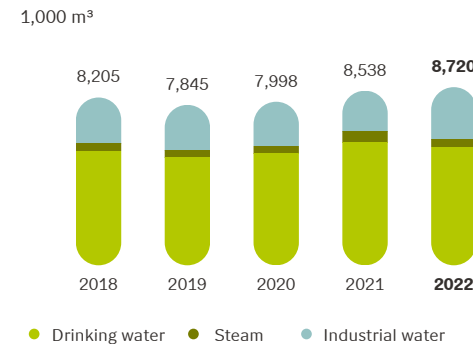
At community level, we drive collective action with communities and organizations within our production basins. Our actions address shared water challenges such as flooding, ecosystem service, water quality and scarcity, through collective action on WASH, nature restoration and watershed restoration.

We disclose our water security impacts through CDP every year, and in 2022, Novozymes received an “A-” leadership ranking recognizing our good water management practices.

### 2022 summary

In 2022, our water withdrawal increased by 2% compared with 2021 and wastewater discharge also increased by 2% compared with 2021. This change was due to increased production and shows a lower rate than our organic sales growth of 9%.

### Water withdrawal by primary source



Through our major projects in operations, we achieved water savings of approximately 41,000 m³ for the year. These are related to a capex investment at our site in Blair, USA.

We met our 2022 milestone targets for developing our context-based water management plans for all our production sites, and their implementation will guide our actions in the coming years. We have identified site-specific risks, opportunities and actions aimed at improving the health of our operational basins.

Prioritized focus areas cover both our operations and our communities and include collective action, recycling, nature restoration and WASH. In Taihu basin, China, we have transitioned into phase 2 of our collaboration with the World Wide Fund for Nature (WWF) and local experts.

### Water by primary source 1,000 m³

	2022	2021
Drinking water	5,788	5,906
Industrial water	2,554	2,249
Steam	378	383
<b>Water withdrawal, total</b>	<b>8,720</b>	<b>8,538</b>

Environmental data

# 7.3 Water (continued)

WWF supports us in piloting draft Science Based Target methodology for water, taking into consideration the local context.

We are also co-leading a multi-stakeholder collaboration on a wetland and ecosystem conservation plan in Jincang Wetland in Taihu basin and Qilihai wetland in Bohai Bay, China. Our goal is to gradually convert the wetland from a landscape functional park to a thriving wetland with enhanced ecosystem services. Additionally, we are working with Green Partnership of Industrial Parks, TEDA and academics to develop water stewardship guidance for TEDA industrial park.

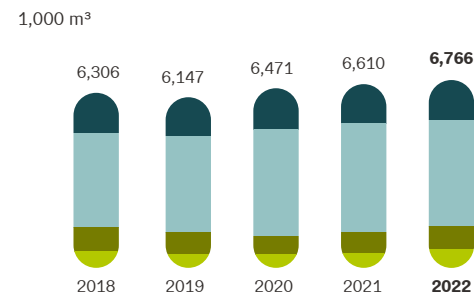
In India, via the Novozymes Water Opulence project, we have been collaborating with our local community since 2020 to drive action to ensure water availability and groundwater restoration, while making sure that challenges at the basin level are managed. Since then, we have reached more than 1,800 people spread across five villages.

In Kalundborg, Denmark, we announced a collaboration with Novo Nordisk and Kalundborg Forsyning (Utility) to invest in a new district cooling system that will use cold salt water from the ocean instead of freshwater from the local lake.

The new cooling system will connect the factories of Novo Nordisk and Novozymes in a closed loop, and it will eliminate the need to use freshwater from Lake Tissø for cooling purposes.

Going forward, we continue to develop projects and initiatives that would allow us to reduce our dependence on freshwater, especially in water-stressed sites. These include water recycling within our own operations and water efficiency projects. We also aim for active engagement within our value chain to identify hotspots and develop engagement plans in the coming years.

### Wastewater by treatment method



- Novozymes-treated to external water recipient
- Novozymes-treated to irrigation
- Novozymes-treated to external treatment
- Untreated to external treatment

Wastewater discharged 1,000 m³	2022	2021
Wastewater to irrigation	825	786
Wastewater to surface water or treatment	5,941	5,824
<b>Wastewater discharged, total</b> <span style="background-color: #8bc34a; color: white; padding: 2px;">ESG</span>	<b>6,766</b>	<b>6,610</b>

### Accounting policies

Water withdrawal refers to the sum of all water types drawn into the boundaries of Novozymes from all sources. Water includes drinking water, industrial water and externally supplied steam.

Drinking water is water of drinking water quality. Industrial water is not of drinking water quality, but is suitable for certain industrial processes, for example for use in cooling towers. Industrial water may come from lakes or wells.

The reported quantities are stated based on the metered intake of water to Novozymes and include quantities withdrawn both in the production process and in other areas. The reported quantities of steam are converted to volumes of running water and are therefore subject to calculation.

Wastewater is measured as the volume discharged by Novozymes or calculated based on water withdrawal.

## Environmental data

## 7.4 Waste

Novozymes is committed to managing waste and resources in a circular manner. In our operations, we take a holistic approach towards circularity, such as by improving packaging recyclability, as well as site-specific initiatives to reduce and recover waste. In addition, our biosolutions enable our customers to adopt practices that help minimize waste from their operations. For example, some of our grain and vegetable oil processing biosolutions enable our customers to optimize resource utilization by unlocking additional starch, protein and oils from feedstocks, hence reducing waste.

### Our approach

Responsible waste and packaging management at Novozymes is a key element of our efforts to reduce the environmental impact of our operations. We remain committed to have zero waste to landfill from our operations by 2030. This year we introduced a new commitment to have three key circular projects successfully implemented by 2030. To deliver on these long-term ambitions, we work with milestone targets.

In 2022, we concluded our milestone targets for 2022 of achieving circular management of our biomass waste, developing plans for 100% circular management of key packaging materials and

programs to reach zero waste. We also introduced a new milestone target to have two key circular projects in pilots with demonstrated benefit by 2025.

Guided by our aim to achieve zero waste to landfill, we have a site-specific waste management approach. We actively work with local experts and service providers to explore localized opportunities to manage waste. This allows us to manage this complex issue in alignment with local regulations and external service providers. We are also committed to minimizing the impact of the waste generated by our packaging materials by making our key packaging materials recyclable and reusable.

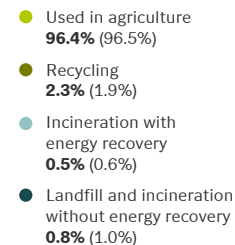
### 2022 summary

In 2022, we met our milestone targets of achieving circular management of our biomass waste, developing plans for 100% circular management of key packaging materials and programs to reach zero waste by 2030 at our sites.

The total recycling and composting rate was 99%, and only 1% was sent to landfill or incineration without energy recovery. The total waste increased from 481,000 tonnes in 2021 to 559,000 tonnes in 2022. The change was mainly due to higher water content in the biomass. To

facilitate transportation and application of biomass waste we adjust its water content in accordance with local requirement, ranging from 5% to 85%.

### Total waste by disposal method 2022 (2021)



Our waste is composed of biomass waste and non-biomass waste, and a small fraction of that is treated as hazardous waste.

### Biomass

Most of the waste generated during the production of our solutions constitutes biomass. It has essential nutrients such as nitrogen and phosphorus, making it ideal for supporting agricultural activities.

In 2022, 100% of our biomass was managed in a circular manner compared to 99% in 2021. We closed the gap by finding new partners to benefit from this waste stream. Our biomass waste is utilized as raw material in fertilizer production for agriculture with or without prior biogas production.

The weight of the biomass upon exit from our facilities varies depending on the site and the biosolutions produced there. In 2022, the total dry matter content for biomass used in agriculture was 53,000 tonnes.

	Biomass wet (actual)		Biomass dry matter (excl. water)	
	2022	2021	2022	2021
<b>Biomass 1,000 tonnes</b>				
Used in agriculture	538.8	463.5	53.1	50.5
Landfill	-	2.4	-	1.4
<b>Biomass, total</b>	<b>538.8</b>	<b>465.9</b>	<b>53.1</b>	<b>51.9</b>

## Environmental data

## 7.4 Waste (continued)

Waste 1,000 tonnes	2022	2021
<b>Biomass, total</b>	<b>538.8</b>	<b>465.9</b>
<b>Nonhazardous waste</b>		
Incineration	2.2	2.1
Landfill	3.6	2.2
Recycling	11.4	6.5
<b>Nonhazardous waste, total</b>	<b>17.2</b>	<b>10.8</b>
<b>Hazardous waste</b>		
Incineration	1.4	1.1
Landfill	0.2	0.1
Recycling	1.7	2.6
<b>Hazardous waste, total</b>	<b>3.3</b>	<b>3.8</b>
<b>Waste, total</b>	<b>559.3</b>	<b>480.5</b>

Moving forward, we will continue to focus on circular management of all of our biomass.

### Non-biomass waste

Our non-biomass waste accounts for 4% of Novozymes' total waste and it is further classified into nonhazardous and hazardous waste. In 2022, the recycling rate of non-biomass waste was 63% compared with 62% in 2021. The remaining 37% of the waste was sent to landfill or incineration.

\* The targets do not include sites with activities not considered to have a significant environmental impact, e.g. sales offices, R&D labs, etc.

The increase of nonhazardous waste from 2021 to 2022 was mainly driven by product scrapping, with the majority of it being recycled.

In 2022, all of our sites\* finalized developing programs to reach zero waste. Their implementation will guide our actions towards our zero-waste target in the coming years. To reduce, recycle, reuse and recover the waste generated, we identified site specific risks, opportunities and actions. Initiatives from these plans have been prioritized

and implementation has started. We have also undertaken various initiatives such as process improvements, resource optimization, process planning and waste sorting in order to optimize waste management.

Across various regions, our employees have led initiatives to improve waste management. For example, at our site in Bangalore, India, we have initiated the process of converting food waste collected in our canteens to compost, which is distributed to employees for gardening.

Our site in Blair, U.S., was presented with the Nebraska Recycling Council's 2022 Waste Diversion Award. The site was recognized for its strides towards our zero waste to landfill target, with biomass waste being diverted to land application, filter pads diverted to compost,

recyclables diverted to single stream recycling program and the orange bag program that helps recover non-recyclable plastics.

### Circular Packaging

In 2022, we completed the development of nine plans to make our key packaging recyclable, re-usable or compostable. Actions from these plans have been prioritized and implementation has started. Overall, we have strong processes to evaluate and introduce new enzymes packaging based on recyclability and reusability criteria.

Moving forward, we will actively work towards introducing packaging made with less virgin plastics and we will continue implementing our circular packaging plans and further integrate them into our packaging strategy.

### Accounting policies

Biomass is measured or calculated based on volume or weight produced. At each site, biomass is produced with different dry matter to water ratio. The quantity of biomass dry matter is calculated based on spot checks of the dry matter content present in the wet biomass.

Non-biomass waste is the registered volume of waste broken down into hazardous and nonhazardous waste, and by disposal method. The amount recycled is the quantity recycled internally or sent to an external service provider for recycling.

## Environmental data

## 7.5 Environmental compliance

Compliance with environmental norms and regulations is a high priority for Novozymes, so as to maintain business continuity and day-to-day running of operations. Novozymes is committed to complying with all environmental regulations and maintaining high standards of environmental management in various aspects, including pollution prevention, resource conservation and waste reduction. We take the well-being of the communities we operate in seriously. We take action to do our best to implement meaningful solutions effectively for any neighbor complaints we may receive.

### Our approach

Our commitment to environmental compliance is outlined in our Sustainability Policy. All activities to ensure environmental compliance are anchored in the Quality, Environment & Safety function. Novozymes' main production sites are certified to the ISO14001 Environmental Management System. Our Management System is based on this standard and is applied to most of our operations.

Further details on ISO-certified companies can be found in Note 6.9 Group Companies.

Environmental incidents and neighbor complaints are recorded in CAPTURE, our global incident management system. This system enables us to implement suitable remedial action to correct and prevent re-occurrence in the future. We strive to minimize the number of non-compliances and neighbor complaints.

### 2022 summary

A total of 21 environmental incidents were registered across our facilities in 2022, compared with 13 in 2021. Most of them were related to wastewater discharge and air emission requirements. None resulted in environmental fines. Plans for preventive action for these incidents have been agreed with the relevant authorities.

Novozymes received 23 neighbor complaints in 2022, compared to seven received in 2021. Most of them pertained to odor cases associated with the treatment of biomass in a newly installed biomass handling system. Mitigation actions such as improvements to the air ventilation system to reduce odor and avoid reoccurrences are being carried out.

### Accounting policies

Breaches of environmental regulatory limits are measured as the number of incidents in the reporting year considered not to be in conformity with environmental permits or requirements under environmental law.

Breaches related to annual control measurements of spills reported in previous years are not included, as they are not indicative of performance during the reporting year.

Neighbor complaints refers to the number of registered environmental complaints, primarily odor and noise related.

## 7.6 Bioethics & biodiversity

Inspired by nature, Novozymes strives to find biological answers for better lives in a growing world. As a biology-based business, we interact with nature and biodiversity over various stages of our research, development, innovation, operations and product use. From the establishment of our company, we have been analyzing microorganisms and fungi at a molecular level to create biosolutions that can help solve some of the world's biggest challenges with a special focus on climate, food systems and health.

### Our approach

Novozyymes' approach to biodiversity is guided by the principles of the United Nations' Convention on Biological Diversity (U.N. CBD), including the Nagoya Protocol on access and benefits sharing. When we collect biological samples in nature, it is important that we always follow the local laws of the countries where we operate as well as complying with globally recognized principles on the utilization of genetic resources. We have defined systems and processes, guided by an internal CBD and Nagoya Protocol committee to ensure compliance with local and global regulations, guidelines and protocols.

We work closely with our stakeholders to ensure that guidance and requirements from regulatory authorities on biotech innovation are duly followed. We are committed to using scientifically sound tools and developing solutions that are safe to humans, animals and the environment.

We are fully aware of the need to constantly challenge ourselves to see not only the possibilities of our solutions, but also the potential negative impact we have on biodiversity as a company and the need to act on it. We also closely follow the development in this area and regularly assess how to incorporate best practice in our operations, products and reporting among other things through constant dialogue with relevant business groups and U.N. organizations.

### 2022 summary

In 2022, we continued to closely monitor and participate in ongoing discussions and dialogues on nature and biodiversity loss across the globe. As an active member of multilateral organizations, we followed developments related to methodologies for companies to monitor and establish targets to prevent nature loss. We continued to be a part of the technical dialogue on biodiversity through industry and business groups such as the International Chamber of Commerce.

In December 2022, we attended the U.N. CBD COP 15 in Montreal, Canada as an observer to be a part of negotiations on the conservation of biological diversity, sustainable use of its components and fair and equitable sharing of benefits from the use of biodiversity. We welcome the outcomes of COP 15 and the creation of post-2020 global biodiversity framework. We initiated the process of identifying the impact of global developments across Novozymes' operations and the organization as a whole. We are actively seeking opportunities to align our ambition and actions with the post-2020 global biodiversity framework, its 2050 vision and mission and its associated 2030 targets.

We also acknowledge the need for science-based tools to evaluate our net impact on biodiversity, so we can understand, track and act on the urgent need for change together with other companies and as a global society.



## 7.7 Product stewardship

At Novozymes, we ensure our biosolutions are produced responsibly and that they are safe for humans, animals and the environment. Product stewardship is a priority for our business given that many of our biosolutions serve as ingredients in consumer products such as detergents or are used to manufacture consumer products such as food, textiles, paper, livestock, and more recently, dietary supplements and cosmetics.

### Our approach

Product stewardship is an integral part of Novozymes' Quality Management System, and our approach is outlined in our Quality and Product Safety Policy. Procedures ensuring product stewardship for customers and end-users are enforced globally and audited by an independent external body. We collaborate with our customers, suppliers, and various trade associations to drive product safety and stewardship.

Novozymes has internal targets on product stewardship that guide our progress. We evaluate performance particularly in the areas of product safety and hazardous substance management.

We constantly strive to reduce risks for humans, animals and the environment.

For example, we seek to improve our products to ensure enzymes release a minimum amount of dust and prevent allergies. We also educate our employees and customers in safe handling of our products using multiple communication channels, such as safety data sheets, videos, posters, brochures and safety catalogues.

Wherever feasible, we substitute hazardous substances in our operations with safer alternatives. Through a rigorous and comprehensive cross-functional process, new and existing chemicals are screened annually for human health and environmental safety aspects, followed by risk and feasibility assessments to determine candidates for potential phase-out from our products.

To make it easier for our customers to ensure compliance of their products, we have a structured approach to related topics such as product information and labeling, traceability, industrial biotechnology, REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), FIAP (Food Improvement Agents Package) and animal testing. Novozymes is a leading REACH registrant and remains firmly committed to maintaining high-quality dossiers that document product safety and provide transparency.

### 2022 summary

For the second year in a row, Novozymes was a recipient of the Safer Choice Partner of the Year award by the US Environmental Protection Agency. It recognizes companies whose products and ingredients meet or exceed specific safety criteria and thereby promote human health and environmental sustainability.

### Product safety

In 2022, we improved our Safety Catalogue, an internal guidance tool on how our biosolutions can be safely used. For our microbial biosolutions, we launched our first safe-handling manual for customers with usage recommendations according to standards set by regulatory authorities and accepted industrial practice. It has now become easier and more intuitive for our employees and customers to find information on how to handle these products safely.

We launched our new cloud-based Regulatory Information Management System, which provides a common backbone for product stewardship activities across Regulatory Affairs by harmonizing our processes and enabling more digital collaboration internally and with customers and other external partners.

### Hazardous substance management

To address societal concerns and consumer demand for "preservative free" products, in 2022, we successfully phased out preservatives from some of our enzymes products by completing their removal and/or substitution of with other formulation ingredients.

In 2022, many of our products in the textile and leather industries received OEKO-TEX® certification, which requires proving the absence of unwanted chemicals such as carcinogen, volatile organic compounds, heavy metals, organotin, flame retardants etc. This certification is key for our textile and leather customers to bring certified greener products to the market.

Going forward, we will focus on developing further safety guidance for our microbial products and collaborating with customers to further phase out prioritized substances of concern, such as titanium dioxide.



Note 8

# Social and governance data

- 8.1 Labor practices & human rights
- 8.2 Inclusion & diversity
- 8.3 Employee safety & well-being
- 8.4 Business ethics
- 8.5 Customer engagement
- 8.6 Community engagement
- 8.7 Responsible sourcing

## Mandatory statement on Corporate social responsibility, cf. section 99a in the Danish Financial Statements Act

The Notes on Environmental data and Social and Governance data forms the reporting required by section 99a in the Danish Financial Act.

Topic	Reference
Business model	Our business p 19-25
Content of commitments, management approach, targets, data, initiatives, and related progress on corporate social responsibility issues:	
Climate and environment	Notes on <a href="#">Environmental data</a>
Social matters	Notes on Social and Governance data
Human rights	Note on <a href="#">Labor practices and Human rights</a>
Anti-corruption and bribery	Note on <a href="#">Business Ethics</a>

Completion rate of business integrity training for employees

97%

Increase from 1.5 in 2021 in Lost-Time Injury frequency (per million working hours) to

1.7

Women in senior management down from 34% in 2021 to

33%

## 8.1 Labor practices & human rights

At Novozymes, we take responsibility to ensure we follow proper labor practices and that human rights are respected both within our organization and throughout our value chain.

### Our approach

We have adopted a common management approach and reporting structure for labor practices and human rights. Our People and Organization (P&O) function, together with leaders across Novozymes, are responsible for ensuring equal rights for all employees. We are committed to ensuring equal opportunities and avoiding discrimination based on age, sex, gender identity, race, national origin, ethnicity, disability, education, sexual orientation, and religious beliefs in our global organization.

Novozyymes is committed to providing a work environment where all individuals can work together free of any kind of harassment and discrimination. Novozymes recognizes and respects the right to form and join unions and associations and to bargain collectively. Our P&O function works together with the regional leadership to facilitate the fulfillment of these fundamental rights, particularly in countries with limited labor legislation.

We conduct regionally focused human rights impact assessments to identify and assess human rights risks and impacts in our business and supplier base. As human rights risks vary from region to region, this approach enables us to gain a more comprehensive understanding of human rights risks, our positioning, and the associated gaps within the respective regions.

Novozyymes respects human rights as defined by the U.N. Guiding Principles on Business and Human Rights and has implemented them in our operational policies and procedures. We respect the International Bill of Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, and, since 2001, we have been a signatory to the United Nations Global Compact. Novozymes is also a signatory to the Women's Empowerment Principles. We publish an annual statement under the U.K. Modern Slavery Act.

### 2022 summary

#### *Labor practices*

The rate of employee turnover decreased to 11.4% from 11.8% in 2021. The rate of employee turnover is consistent with general developments in the labor market.

In 2022, we recorded a 2.6% rate of absence, compared to 2.2% in 2021. In both years, the effects of the COVID-19 pandemic along with new legislations which require people to stay at home if they have been in contact with someone

who has tested positive for COVID-19 continues to impact the absence rate. The rate of absence has been broken down in the table below into grouped job categories.

Employee statistics		2022	2021
Rate of employee turnover - retirement	%	1.0	0.9
Rate of employee turnover - dismissal	%	2.1	3.4
Rate of employee turnover - voluntary	%	8.3	7.5
<b>Rate of employee turnover, total</b>	%	<b>11.4</b>	<b>11.8</b>
<b>Rate of absence</b>			
Senior management, management, professional and administrative	%	1.7	1.2
Skilled workers, laboratory technicians, other technicians and process operators	%	4.1	3.6
All employees	ESG %	2.6	2.2
<b>Other employee statistics</b>			
Average age	years	41.9	42.0
Average seniority	years	9.2	9.7
Number of expatriates	No.	18	23

## Social and governance data

## 8.1 Labor practices & human rights (continued)

### Human rights

We believe that respectful, professional conduct by all employees furthers Novozymes' purpose and is fundamental to a good workplace. In 2021, we launched company-wide global training for all employees on non-discrimination and anti-harassment. In 2022, we made the training mandatory for all new employees, as part of their onboarding.

Every year we conduct regionally focused Human Rights Impact Assessments. In the past five years, we have completed assessments for India (2018), Europe (2019), The Americas (2020), China (2021) and the Asia Pacific, the Middle East and Africa Region (2022).

Across these regional assessments, we have identified no systematic human rights violations within our global operations. Isolated incidents regarding business integrity and harassment had appropriate mitigation measures. Going forward, we will continue to monitor human rights and take appropriate measures to close gaps and mitigate identified risks.

### Accounting policies

Absence is defined as time lost due to an employee's illness, including leave, and occupational injuries and diseases. The rate of absence is calculated as the number of registered days of absence as a percentage of the total number of normal working days in one year, less vacation and public holidays.

The rate of employee turnover is calculated as employee turnover divided by the average number of permanent employees. Employee turnover is measured as the number of permanent employees leaving the Group during

the preceding year excluding employees at divested entities transferred to the acquiring company.

Average age and seniority are calculated as the sum of employees total age/seniority in whole years at the reporting date, divided by the number of employees.

Expatriation refers to Novozymes employees temporary reassigned within Novozymes from the country of original employment for periods of more than six months.



## 8.2 Inclusion & diversity

Across Novozymes, employees bring together diverse and complementary skills, a spirit of collaboration and shared values to form a vibrant culture. Nurturing an inclusive and diverse organization where employees thrive is the foundation from which we can continue to bring the power of biotech to the world.

### Our approach

We are committed to nurture a culture of diversity, equity and inclusion. By 2030, we aim to achieve gender balance across all professionals and in senior management. This means that, we will strive for a minimum of 45% women and 45% men across all professionals and in senior management. To deliver on our long-term ambition, we work with milestone targets. In 2022, we concluded our non-financial milestone target of Nurture Diversity Index and launched a new milestone target for 2025. We aim to achieve a minimum 35% women in senior management and of 45% women across all professionals by 2025.

We recognize that focusing on diversity of representation alone is not enough. For diverse teams to succeed, people need to feel that they are valued, respected, and have a sense of shared purpose, and thus we focus on inclusion.

We take a regional approach to develop and define programs based on local demographics, to address diversity dimensions beyond gender.

At Novozymes, we have a policy for diversity and equal opportunities, which applies to the entire workforce. Our People and Organization (P&O) function, together with regional leaders across Novozymes are responsible for ensuring equal opportunities and for promoting Diversity, Equity and Inclusion (DE&I). Novozymes' Global Flexibility Policy acknowledges that our employees may have different needs at different phases of their lives, and to accommodate those needs, it is our intention as a company to offer as much flexibility for our employees as possible without compromising efficiency, company culture and well-being.

### 2022 summary

In 2022, our senior management consisted of 214 employees of which 33% were women, a slight decrease compared to 34% in 2021.

Nevertheless, the gender diversity balance across all professionals improved to 43% women and 57% men compared to 41% women and 59% men in 2021.

Furthermore, we achieved 86 on our Nurture Diversity Index, thus successfully meeting our target of 86.

We have engaged in various forums to learn about and promote DE&I such as the World Economic Forum in Davos and the Female Force 2025 Initiative by Egon Zehnder and Bain & Company to name a few.

Across our global organization, hiring managers and people leaders have access to material on how to strengthen diversity in recruitment (focusing on bias) along with addressing screening, interviewing and evaluating candidates.

We have different projects and initiatives to promote a diverse workforce at Novozymes. For example, in India, the Zym(H)ers club (Employee

Resource Group) has continued nurturing women empowerment through inspiring "Choose to Challenge" sessions by women leaders and sensitization on financial well-being. As a step towards inclusion in health care benefits, Novozymes India widened the scope by including LGBT partners under its existing medical coverage. Various infrastructural changes across India sites such as lactation rooms and pad care dispensers have been introduced to aid women's hygiene.

Across several of Novozymes' regions (North America, Latin America, Asia Pacific, the Middle East & Africa) we have conducted "Unconscious Bias" training through which we aim to educate employees and help eliminate biases across the organization.

Gender diversity		2022		2021	
		Women	Men	Women	Men
In senior management	ESG %	33	67	34	66
In management	%	40	60	39	61
At professional levels	%	45	55	44	56
<b>Across all professionals</b>	<b>%</b>	<b>43</b>	<b>57</b>	<b>41</b>	<b>59</b>

## 8.2 Inclusion & diversity (continued)

In 2022, China updated its P&O Policy to further support employees' requirements across various life stages such as extended maternity and paternity leave, childcare leave and parent care leave.

In Denmark, we aligned to new legislation by amending our maternity/paternity leave policy to entitle both parents to equal access to paid leave and with single parents entitled to prolonged access to paid leave. Following the new Danish legislation, we are seeking to incorporate further leave policies supporting LGBTQ+ families. During the Copenhagen Pride Week, we raised the pride flag to show our support for the cause and our commitment to human rights, equity, diversity, and inclusion. In addition, we invited external speakers to give talks to our employees about different topics within diversity and inclusion to allow employees to broaden their understanding.

In North America, we launched one new Zymer Resource Group – voluntary employee-led group. In total, the four active resource groups in the region are building community, safe space and DE&I awareness throughout the organization. Likewise, in Latin America, the DE&I purpose has been communicated to all employees in the region. In 2022, we conducted training programs with managers on leadership challenges and rewards for managing an inclusive workplace.

Moving forward, we will continue our regional specific approach and focus on being an inclusive and diverse organization.

### Accounting policies

Gender diversity in senior management measures the percentage of women and men in director positions or higher (i.e. director, vice president or executive vice president).

Gender diversity in management measures the percentage of women and men in middle management and specialist manager positions.

Gender diversity at professional levels measures the percentage of women and men in positions typically requiring an academic background or team lead positions.

Gender diversity across all professional levels, measures the percentage of women and men across professional, manager and senior leadership levels.

All of the above classifications are based on internal job categories.

Nurture Diversity Index measures the ratio of women and international employees at both senior leadership and management level. If women and international employees were represented at the same ratio in all management layers as in the academic population (professionals) in Novozymes as such, the Index would be 100.

## 8.3 Employee safety & well-being

Novozymes is steadfast in helping employees thrive across various stages of their professional pathway, whether it is staying safe, healthy, having meaningful work contributions or learning new skills to advance in their careers. We want them to have a positive work-life synergy and bring out their best at work and beyond. This is crucial to our success as a business and for sustaining our reputation as a great place to work.

### Our approach

We are committed to a workplace where employees stay safe, thrive and grow. To deliver this long-term ambition, we work with milestone targets. In 2022, we concluded our nonfinancial milestone targets for 2022 on lost-time injury frequency, Zymer Spirit Index and Enable Learning, and we launched two new milestone targets for 2025. By 2025, we aim to achieve a three-year rolling average of occupational injuries with absence  $\leq 1.5$ . In addition, by 2025, we aim to match the benchmark in our Thrive index score.

To support our culture, our People and Health & Safety Policies set the guidelines, and our employee survey serves as an important tool to track the organization disposition and support better team conversations focusing on how we work together at Novozymes.

Our Health & Safety management system aims to ensure that robust safety processes, equipment, standards, tools and training are fully integrated into the way we work. Our global incident handling system CAPTURE enables us to anchor improvements, corrective actions, incidents, and inspections to work smarter, and implement targeted, theme-based safety initiatives. Injury prevention is a focal point for Novozymes, and our preventive programs for enzyme and biological safety benefit both employees and customers.

Our global and regional well-being groups address local health and well-being challenges. Learning and development is a key managerial responsibility, with support from the People & Organization function.

### 2022 summary

In 2022, we achieved a score of 83 on our Zymer Spirit Index (82 in 2021), showing that our employees are engaged and committed to our purpose and strategy. During the year, we focused on implementing our strategy and ensuring a clear direction for the future. We also conducted initiatives to nurture our culture, e.g. a global campaign in which employees engaged with our purpose. Employees across some of our regions were challenged by the COVID-19 pandemic and were

affected by the war in Ukraine. Through regional crisis response teams, our leadership, and supporting functions at Novozymes, we helped employees manage these changes through clear communications and actions.

### Safety

In 2022, we conducted several initiatives to support safety awareness, such as our global mandatory safety e-learning for all employees and multiple site and regional safety dialogues. We will continue to drive a safety culture, to ensure that a part of the daily routines in our organization and to

proactively prevent injuries. Our three-year rolling average frequency of occupational injuries per million working hours was 1.5 (1.2 in 2021). Moving forward, we will continue to drive a safety culture, to ensure that safety behaviors are part of our organization and to proactively prevent injuries.

### Well-being

In 2022, we launched a research-based e-learning team program that has had a considerable effect on important elements of mental well-being, such as limiting negative thoughts and reducing stress while fostering self-confidence.

### Consequences of occupational injuries

No.	2022	2021
Return to original job	17	16
Return to a different job in the same department	-	-
Out of work or early retirement	-	1
Case pending	3	-
<b>Occupational injuries with absence, total</b>	<b>20</b>	<b>17</b>

### Occupational injuries

		2022	2021
Days of absence due to occupational injuries	No.	564	657
Frequency of occupational injuries	Per million working hours	1.7	1.5

## Social and governance data

## 8.3 Employee safety & well-being (continued)

More than 374 employees have completed the program. This year, we also introduced a combination of videos, workbooks and team exercises on psychological safety to help us bring our true selves to work and challenge each other to become even better.

### Growth

We introduced a new development tool, “Unlocking Leadership”, to further enable leaders

to ensure that Novozymes is a great place to work while creating results. The enrollment of leaders in our leadership development program “Lead the Way” was 56%. In 2022, we also launched our global graduate program to develop talent with strong change and strategy execution capabilities enabled by cross-functional and international rotations.

This year, in our employee survey, we achieved a score of 80 points on Enable learning (79 in 2021), in line with our target of 80 by 2022. We continue

to encourage employees to discover and to learn while building skills and competencies needed for success in existing job roles and career growth.

### Consequences of occupational diseases

No.	2022	2021
Return to original job	-	-
Return to a different job	1	2
Out of work or early retirement	-	-
Case pending	-	-
<b>Occupational diseases, total</b>	<b>1</b>	<b>2</b>

### Occupational diseases

		2022	2021
Days of absence due to occupational diseases	No.	-	-
Frequency of occupational diseases	Per million working hours	0.1	0.2

### Training costs

		2022	2021
Average training cost spent per employee	DKK	4,441	3,792
Percentage of total employee costs	%	0.7	0.6

### Accounting policies

Occupational injuries are defined as the reported number of incidents that occur in the performance of job duties at or between Novozymes locations that prevents the individual from assuming working activities on the next day of their scheduled shift.

Occupational diseases are defined as the number of diseases contracted as a result of an exposure to risk factors arising from work activity and acknowledged as work related in accordance with national legislation.

The consequences of occupational injuries with absence and occupational diseases are measured by recording the work situation once the situation resulting from an incident has stabilized, for example whether the employees have returned to their original jobs, and the total number of calendar days of absence.

Frequencies of occupational injuries with absence and frequencies of occupational diseases are stated per million working hours.

The Zymer spirit, Enable learning and Thrive Index are derived from specific questions in the annual employee questionnaire. The resulting score is a value between 0 and 100.

The “Lead the Way” program indicates the number of leaders globally who have been registered for the leadership development program ‘Lead the Way’. It is shown as a percentage of the total number of current leaders at Novozymes.

Training cost expresses the cost of external training courses and seminars, translated into Danish kroner at average exchange rates. Training spend is also shown as a percentage of total employee costs.



## 8.4 Business ethics

Novozymes is committed to conducting business in a responsible, ethical, and transparent manner, and meeting stakeholders' expectations of high business integrity standards across our operations.

### Our approach

At Novozymes, we live and act as a responsible corporate citizen. Business ethics is integrated into everything we do and plan for the future. It is reflected in our purpose, values, policies and position statements. We promote a strong compliance culture and take relevant measures to ensure compliance to the highest standards across all material environmental, social, governance and financial related issues.

Novozymes' purpose, values and business integrity principles act as the Novozymes' code of conduct in business integrity matters. It forms the basis of our efforts to ensure a compliant business and eliminate all forms of corruption. It applies to all employees across the world and lays ground rules for conducting business with honesty and fairness in compliance with laws and recognized standards for responsible and ethical business practices.

It contains principles, which among other things underline Novozymes' zero tolerance position towards bribery and define clear rules for gifts and hospitality.

All employees have access to relevant guidance on business integrity and are encouraged to raise any concerns through the relevant grievance channels. In addition, Novozymes provides annual compliance training in business integrity and competition law, which is mandatory for employees in scope. It focuses on anti-corruption and it is based on questions raised during the year, including real-life case studies to ensure relevance and applicability. We also provide targeted training on an ad-hoc basis, depending on needs or risks detected or foreseen.

We have a Corporate Business Integrity Committee responsible for the oversight of business integrity matters across Novozymes. Members include executive and senior management representatives from both business and compliance functions. They meet on a regular basis to make strategic decisions, prioritizations and to follow up on the state of business integrity compliance and relevant initiatives.

The committee also engages with external advisors, when relevant for a thorough and qualified decision-making process.

Novozymes works proactively to prevent, detect and respond to fraud, corruption and other business integrity violations. Novozymes has a global corporate whistleblower hotline which allows employees and external partners to report any concerns on illegal or unethical misconduct or other business integrity violations. The whistleblower hotline is supplemented by various internal reporting channels and screening activities. All allegations of fraud, corruption and other business integrity cases are thoroughly investigated. Substantiated violations lead to proportionate disciplinary sanctions for the parties involved and an internal review on compliance gaps or potential improvements of policies and procedures.

Novozymes' responsibility for ensuring ethical business practices also extends to our business partners. Our third-party due diligence processes seek to ensure that our commercial partners conduct business with integrity and share our values regarding legal compliance.

### 2022 summary

This year, our business integrity training was completed by 97% of our employees in scope, compared to 99% in 2021. The training provided a general reminder of the principles we abide by to mitigate the risk of bribery and corruption, with a particular focus on gifts and hospitality. In addition, our competition law compliance training in 2022 served as a general reminder of do's and don'ts and had a focus on competition law aspects associated with external communication.

As in previous years, Novozymes had no reported violations of competition law in 2022.

Advanced data analytics remains the main channel for revealing potential fraud. During 2022, investigations based on whistleblows and tip-offs decreased by nine cases compared to 2021. None of the substantiated cases had material business nor financial impact for the company. The increased threat from cybercrime did not lead to an increase in the number of cybercrime cases in 2022.

## Social and governance data

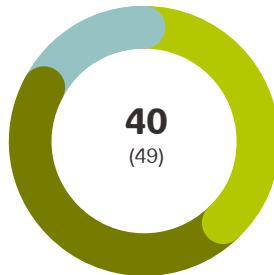
## 8.4 Business ethics (continued)

In 2022, a campaign was carried out to raise awareness about the Novozymes Whistleblower Hotline. The number of reports in Novozymes' Whistleblower Hotline remains fairly low, reflecting that employees are comfortable using other internal grievance channels.

Novozyymes' Audit Committee reviews quarterly information on all whistleblower reporting and other tip-offs on potential fraud and corruption. The charts provide further details of the reporting channels and consequences for fraud and corruption cases.

### Investigation outcome for whistleblows and in-/external tip-offs 2022 (2021)

- Substantiated  
38% (41%)
- Not substantiated  
45% (39%)
- Other\*  
17% (20%)



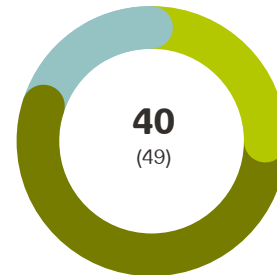
\* Not fraud investigations.

In 2022, the Business Integrity Committee adopted a new framework for business integrity, compliance, governance and oversight. Implementation began in 2022 and will continue throughout 2023-2024.

Selected cases concerning matters of principle were reviewed by the committee for the purpose of providing additional and targeted guidance to the organization, e.g., third party due diligence and donations.

### Reporting channels for potential fraud 2022 (2021)

- Whistleblower  
25% (35%)
- Internal tip-off  
55% (53%)
- External tip-off  
20% (12%)



### Accounting policies

Completion of business integrity training refers to the percentage of employees in scope who completed business integrity training in the last training period. New entities are included within six months of acquisition. Business integrity training is conducted for employees who could potentially influence third-party interactions or decisions as part of their job role. This comprises employees in professional, managerial or administrative positions.

The reporting criteria for a competition law violation is whether it has been established by an authority, which is a member of the International Competition Network, or by a competent court anywhere in the world that a company in the Novozymes Group has violated applicable anti-trust regulations.

Novozyymes defines fraud including corruption, as deliberate misconduct with the intent to gain a direct or indirect personal advantage.

## 8.5 Customer engagement

Together with customers, partners, and the global community, we use the power of biotech to help customers grow their businesses while preserving the planet's resources and enabling better lives. Therefore, customer engagements and partnerships are material to our business. We seek to continue being a trusted business partner that delivers reliable products and innovative solutions.

### Our approach

To meet increasing customer needs, Novozymes proactively engages with customers in different ways. Customer co-creation and commercial leadership are some of the main drivers behind our strategy "Unlocking growth – powered by biotech".

Our Technical Services and Customer Co-Creation teams have a deep understanding of our customers' needs, and they help optimize product use by making necessary adjustments that are tailored to the needs of individual customers such as finding new solutions and applications to help improve their processes and final products.

Our biosolutions enable our customers to produce more efficiently, use raw materials better, reduce

carbon emissions and improve the performance of their products to meet consumer needs.

We also aim to bring value through our online services and digital tools that are designed to be easy to use, inspirational and available whenever our customers need them. We are on a digital journey to increase our digital offerings to customers by providing more transparency on our product offerings, easy access to purchasing, as well as digital collaboration with technical services.

Throughout the year, we respond to several information requests from customers in areas such as governance, strategy, sourcing practices, safety, quality, and sustainability. We provide them with information on our products, services and corporate policies, commitments, targets, and initiatives in a transparent manner.

We believe that getting feedback from our customers is crucial for determining our performance. It assists us in gauging customer expectations and driving improvements to our products and service offerings. We also gather feedback over the course of the year and rapidly respond to concerns and suggestions from customers as they arise.

### 2022 summary

The Customer Satisfaction Survey resulted in a Net Promoter Score (NPS) of 69 in 2022, which was unchanged from 2021. The NPS score shows that our customers still strongly value the continuous support provided by Novozymes, the high quality of our products, long-term relationship and close collaboration, despite the challenging business environment in 2022.

In 2022, we invested in digital solutions to generate potential sales leads via chat-bots and calculators that show the value of selected biosolutions.

In key markets, we continued our work in our regional application centers. Our Innovation Technology Center in Turkey has helped customers produce flatbreads that stay fresh for long,

and our Detergent Design Center in India has supported customers in launching detergents that remove regional food stains.

In 2022, we invested in new in-house capabilities to co-create with customers in food and health. We welcomed food and beverages scientists, nutritionists, regulatory advisors, prototyping experts and many other colleagues to Novozymes. We also invested in new equipment to formulate products for prototyping.

Moving forward, dedicated customer co-creation centers will further accelerate this journey. The first centers will be located in the Raleigh-Durham area, U.S., and in Lyngby, Denmark.

Learn more about customer co-creation in the Strategy & commitments section of this report.

### Accounting policies

The Net Promoter Score (NPS) is derived from an annual questionnaire measuring on a scale from 1-10 how likely the customer is to recommend Novozymes to others. The NPS is

calculated as the share of promoters (rating us 9 or 10) less the share of detractors (rating us 1-6). The resulting score is a value between -100 and +100.

## 8.6 Community engagement

At Novozymes, we pride ourselves on having a culture of changemakers with employees who want to leave a positive mark on the world. We believe we have a responsibility for the well-being of our communities we operate in and to invest strategically in programs that create value to society. We inspire each other to make change happen to deliver on our promise of better lives in a growing world, both inside and outside the workplace.

### Our approach

As part of our strategy, we have ambitious targets to nurture a working environment that empowers employees to give back to the society and the nature that surrounds us. We encourage this by pledging 1% of our work time to community outreach activities that support community needs, help educate the next generation and enable our employees to live more sustainably.

Novozyymes' global community outreach initiative 'Inspire' is driven by passionate employees, who are encouraged to contribute to better lives via initiatives which they are enthusiastic about. All regions have 'Inspire' groups coordinating the local agenda in alignment with the regional leadership teams.

Further philanthropic contributions are done indirectly through our dividend payments to the Novo Nordisk Foundation – through Novo Holdings A/S – which in 2022 held 26% of the shares in Novozymes (see The Novozymes Stock). The Novo Nordisk Foundation's objective is to support scientific, social and humanitarian purposes, and the Foundation contributes to communities in large scale through donations and impact investments.

### 2022 summary

#### *Engaging with our local communities*

In response to the war in Ukraine, we are no longer accepting orders for our products by our Russian and Belarusian customers, and we have discontinued all sales and shipments of our products to Russia and Belarus. In addition, Novozymes supported refugees via multiple initiatives such as sponsoring four trucks for Red Cross' transportation of relief goods to the Romanian-Ukrainian borders and sponsoring two music teachers for one year to give classes to refugees.

Employees donated and helped to pack essential supplies for families impacted by the war in Ukraine, the floods in Australia and for other citizens in need in China and the United States.

Around the world, employees engaged with local communities in many ways, including by collecting trash, planting trees and assisting with nucleic acid testing for Covid-19 diagnosis. For example, in India, we donated 40 refurbished and 30 new laptops to a shelter home and to the Government Polytechnic College for Women.

#### *Helping to educate the next generation*

In Brazil, employees have been actively supporting the NGO 'Coração Acolhedor' on different social projects by helping children make fun experiments, giving lectures to teenagers on their career and job and acting as career mentors.

In Thailand, employees accumulated steps in a virtual donation run to help contribute to raising scholarships for students who are at risk of leaving school and missing out on an education.

In South Africa, employees volunteered time in a gardening activity to help uplift women and vulnerable children from underserved communities by teaching them about sustainability, food security, basic farming skills, in addition to donating the farming tools that were used in the activity.

#### *Empowering employees to live more sustainably*

In India, we established infrastructure for bikes at our campuses to encourage more employees to ride a bike to work. Employees in China has also been encouraged to bike to work. At our Danish sites, employees challenged their habits to reduce their personal CO<sub>2</sub> footprint by selecting reusable cups or bottles during the workday and biking to work instead of taking the car.



## 8.7 Responsible sourcing

Novozymes' responsible sourcing practices are focused on environmental, social, and governance (ESG) issues across our value chain. Agricultural raw materials are a major component of our production processes and having a responsible and secure supply of them is crucial to Novozymes' production.

### Our approach

Novozymes' sourcing department drives our supplier management and responsible sourcing program, anchored within Novozymes Operations, Supply and Quality function. Our approach to responsible sourcing is defined by our Responsible Purchasing Standards (RPS) and managed through our Supplier Performance Management (SPM) process and the Supplier Ethical Data Exchange (SEDEX) platform. Through the SPM process, Novozymes screens suppliers and classifies their risk based on spend, country and category. In case a supplier does not meet our assessment criteria, either an action plan is established, or an alternate supplier is identified. Novozymes uses the SEDEX to engage with suppliers and manage sustainability risks in our supply chain.

Novozymes requires all contracted suppliers to comply with our RPS, as well as, when requested,

to complete questionnaires and to accept visits and audits relevant for confirmation of compliance. Our requirements cover various ESG criteria including respect for human and labor rights, business ethics, employee health and safety and environmental stewardship. In addition, all our suppliers of directly sourced agricultural raw materials are required to adhere to our no-deforestation requirements and to have zero tolerance for land grabbing.

Responsible sourcing is a key driver of Novozymes' journey towards becoming net-zero by 2050. In 2022, we advanced our ambition to source 100% renewable electricity by 2025, five years earlier than previously communicated. We have also committed to reducing our supply chain (scope 3) emissions by 35% by 2030 from a 2018 baseline. These targets are validated by the Science Based Targets initiative (SBTi). Furthermore, we recognize that the climate maturity of suppliers is critical to Novozymes' efforts to reduce emissions, and therefore we engage with suppliers on their own decarbonization efforts.

Further information on our science-based targets and net-zero roadmap is available in the Targets & Outlook section of this report.

### 2022 summary

In 2022, Novozymes continued to expand the use of the SEDEX platform to enhance the transparency of our supply chain. We continued to onboard both high-risk and high-spend suppliers, identified by the results of the hotspot analysis conducted during the previous years.

During 2022, to advance towards sourcing 100% renewable electricity by 2025, we sourced 100% of electricity for our Hongda site in China from renewable sources. We are continuing to focus on progressing the existing renewable opportunities and identifying further long-term solutions. These initiatives require years of preparation.

In 2022, 82% of our overall electricity consumption came from renewable sources, and we are well on track to meet our target for 2025. During 2022, we identified key levers and reduction strategies that will drive decarbonization in our supply chain.

As a member of the Roundtable on Sustainable Palm Oil (RSPO), 100% of the palm-derived products we sourced in 2022 had RSPO's mass balance (MB) or Segregated (SG) certification.

In 2022, Novozymes commenced the process of receiving the RSPO supply chain (MB) certification in Denmark.

This year, we conducted global sustainability training for global category managers which focused on modern slavery and human rights. Furthermore, we also completed a Human Rights Impact assessment in the Asia Pacific, the Middle East & Africa region that covered our supplier base, as described in Note 8.1 Labor Practices & Human Rights.

In 2022, we undertook various responsible sourcing efforts that included increasing green certification requirements for our travel vendors, hotels, and conference venues. In Bangalore, India, we installed two 4-wheeler and three 2-wheeler electric vehicle charging stations to promote cleaner and energy efficient transport. In addition, at our sites in Denmark, we are sourcing organic produce, making efforts to reduce meat consumption and donating obsolete lab equipment to schools, universities and hospitals.

Moving forward, we will implement our updated responsible sourcing strategy and further integrate our corporate nonfinancial commitments in our sourcing and supplier engagement processes.

# Statement of the Board of Directors and Executive Management

The Board of Directors and the Executive Management have today considered and approved the Annual Report of Novozymes A/S for the financial year January 1 – December 31, 2022.

The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act, and the Parent Company Financial Statements have been prepared in accordance with the Danish Financial Statements Act. Management's Review has been prepared in accordance with the Danish Financial Statements Act.

In our opinion, the accounting policies used are appropriate, and the Group's internal controls relevant to preparation and presentation of the Annual Report are adequate. The Consolidated Financial Statements and the Parent Company Financial Statements give a true and fair view of the financial position at December 31, 2022 of the Group and the Parent Company and of the results of the Group and the Parent Company operations and consolidated cash flows for the financial year January 1 – December 31, 2022.

In our opinion, Management's Review includes a true and fair account of the development in the operations and financial circumstances of the Group and the Parent Company, of the results for the year, and of the financial position of the Group and the Parent Company as well as a description of the most significant risks and elements of uncertainty facing the Group and the Parent Company.

Novozymes' Consolidated environmental data and the Consolidated social and governance data and the related notes have been prepared in accordance with the reporting principles of materiality, inclusivity, responsiveness and the accounting policies. In our opinion, they give a true and fair view of the organisation's environmental, social and governance performance in accordance with these principles.

In our opinion, the Annual Report of Novozymes A/S for the financial year January 1 - December 31, 2022 identified as NOVOZYMES-2022-12-31-en.zip has in all material respects been prepared in compliance with the ESEF Regulation.

We recommend that the Annual Report be adopted at the Annual Shareholders' Meeting.

*Bagsvaerd, January 26, 2023*

## Executive Management

**Ester Baiget**  
President & CEO

**Lars Green**  
CFO

## Board of Directors

**Jørgen Buhl Rasmussen**  
Chair

**Cornelis (Cees) de Jong**  
Vice Chair

**Anne Breum**

**Heine Dalsgaard**

**Sharon James**

**Anders Hentze Knudsen**

**Kasim Kutay**

**Preben Nielsen**

**Kim Stratton**

**Jens Øbro**

**Morten Otto Alexander Sommer**

# Independent Auditor's Reports

## To the shareholders of Novozymes A/S

### Report on the audit of the Financial Statements and the Environmental, Social and Governance Data

#### Our opinion

In our opinion, the Consolidated Financial Statements give a true and fair view of the Group's financial position at December 31, 2022 and of the results of the Group's operations and cash flows for the financial year January 1 to December 31, 2022 in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

Moreover, in our opinion, the Parent Company Financial Statements give a true and fair view of the Parent Company's financial position at December 31, 2022 and of the results of the Parent Company's operations for the financial year January 1 to December 31, 2022 in accordance with the Danish Financial Statements Act.

In our opinion, the Consolidated environmental data and the Consolidated social and governance

data for the financial year January 1 to December 31, 2022 are prepared in accordance with the accounting policies for the Consolidated environmental data and the Consolidated social and governance data.

Our opinions are consistent with our Auditor's Long-form Report to the Audit Committee and the Board of Directors.

#### What we have audited

The Consolidated Financial Statements of Novozymes A/S, pages 64-72 and 77-136 for the financial year January 1 to December 31, 2022 comprise the consolidated income statement and statement of comprehensive income, the consolidated balance sheet, the consolidated statement of equity, the consolidated cash flow statement and the notes, including significant accounting policies.

The Parent Company Financial Statements of Novozymes A/S, pages 167-180 for the financial year January 1 to December 31, 2022 comprise the income statement, the balance sheet, the statement of equity and the notes, including significant accounting policies.

These are collectively referred to as the "Financial Statements".

The Consolidated environmental data and the Consolidated social and governance data of Novozymes A/S, pages 73-76 and 137-160 for the financial year January 1 to December 31, 2022 comprise the environmental performance and consolidated data, the social and governance performance and consolidated data and the related notes, including significant accounting policies.

These are collectively referred to as the "Environmental, Social and Governance Data."

#### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) and the additional requirements applicable in Denmark. Our responsibilities under those standards and requirements are further described in the Auditor's responsibilities for the audit of the Financial Statements and the Environmental, Social and Governance Data section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Independence

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (IESBA Code) and the additional ethical requirements applicable in Denmark. We have also fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

To the best of our knowledge and belief, prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 were not provided.

#### Appointment

We were appointed as auditors of Novozymes A/S for the first time after the initial public offering on March 21, 2001. We have been reappointed annually by shareholder resolution for a total period of uninterrupted engagement of 22 years, including the financial year 2022.



**Key audit matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Financial Statements for 2022. These matters were addressed in the context of our audit of the Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

*Key audit matter*

## Revenue recognition

Novozymes has entered into various sales agreements that are subject to interpretation, which increases the inherent complexity of revenue recognition. Additionally, the volume of transactions and geographical spread of the Group's operations increase complexity, including in respect of occurrence and timing of revenue.

We focus on this area because of the significance to the Consolidated Financial Statements, as well as the inherent complexity in both revenue recognition and individual sales agreements including different terms therein.

Refer to Note 2.2 to the Consolidated Financial Statements.

*How our audit addressed the key audit matter*

We considered the appropriateness of the Group's accounting policies for revenue recognition and assessed compliance with applicable financial reporting standards.

We updated our understanding of relevant controls, including Group controlling procedures and IT systems, and business processes regarding the revenue recognition. For the controls, we assessed whether they were designed and implemented to effectively address the risk of material information.

We tested relevant controls, including monitoring controls, implemented to ensure the occurrence and timing of revenue recognised.

We discussed the judgements related to the recognition and classification of revenue with Management.

We performed substantive procedures regarding returns, delivery terms and rebates in order to assess the principles applied for occurrence and timing of revenue.

We applied data analysis in our testing of revenue transactions in order to identify and test transactions outside the ordinary transaction flow.

Finally, we assessed the adequacy of disclosures relating to revenue recognition.

**Statement on Management's Review**

Management is responsible for Management's Review, pages 3-63 and 181-182.

Our opinion on the Financial Statements and on the Environmental, Social and Governance Data does not cover Management's Review, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Financial Statements, our responsibility is to read Management's Review and, in doing so, consider whether Management's Review is materially inconsistent with the Financial Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

Moreover, we considered whether Management's Review includes the disclosures required by the Danish Financial Statements Act.

Based on the work we have performed, in our view, Management's Review is in accordance with the Consolidated Financial Statements, the Parent Company Financial Statements and the Environmental, Social and Governance Data and has been prepared in accordance with the requirements of the Danish Financial Statements Act. We did not identify any material misstatement in Management's Review.

**Management's responsibilities for the Financial Statements and the Environmental, Social and Governance Data**

Management is responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act and for the preparation of parent company financial statements that give a true and fair view in accordance with the Danish Financial Statements Act, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Furthermore, Management is responsible for preparing the Environmental, Social and Governance Data in accordance with the accounting policies for the Environmental, Social and Governance Data, and for such internal control as Management determines is necessary to enable the preparation of Environmental, Social and Governance Data that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, Management is responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless

Management either intends to liquidate the Group or the Parent Company or to cease operations, or has no realistic alternative but to do so.

**Auditor's responsibilities for the audit of the Financial Statements and the Environmental, Social and Governance Data**

Our objectives are to obtain reasonable assurance about whether the Financial Statements and the Environmental, Social and Governance Data as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements and the Environmental, Social and Governance Data.

As part of an audit in accordance with ISAs and the additional requirements applicable in Denmark, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Financial Statements and

the Environmental, Social and Governance Data, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Parent Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Parent Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are

required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group or the Parent Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that gives a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information, environmental, social and governance data of the entities or business activities within the Group to express an opinion on the Consolidated Financial Statements and the Environmental, Social and Governance Data. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

## Report on compliance with the ESEF Regulation

As part of our audit of the Financial Statements we performed procedures to express an opinion on whether the annual report of Novozymes A/S for the financial year January 1 to December 31, 2022 with the filename NOVOZYMES-2022-12-31-en.zip is prepared, in all material respects, in compliance with the Commission Delegated Regulation (EU) 2019/815 on the European Single Electronic Format (the “ESEF Regulation”) which includes requirements related to the preparation of the annual report in XHTML format and iXBRL tagging of the Consolidated Financial Statements including notes.

Management is responsible for preparing an annual report that complies with the ESEF Regulation. This responsibility includes:

- The preparing of the annual report in XHTML format;
- The selection and application of appropriate iXBRL tags, including extensions to the ESEF taxonomy and the anchoring thereof to elements in the taxonomy, for all financial information required to be tagged using judgment where necessary;

- Ensuring consistency between iXBRL tagged data and the Consolidated Financial Statements presented in human-readable format; and
- For such internal control as Management determines necessary to enable the preparation of an annual report that is compliant with the ESEF Regulation.

Our responsibility is to obtain reasonable assurance on whether the annual report is prepared, in all material respects, in compliance with the ESEF Regulation based on the evidence we have obtained, and to issue a report that includes our opinion. The nature, timing and extent of procedures selected depend on the auditor’s judgment, including the assessment of the risks of material departures from the requirements set out in the ESEF Regulation, whether due to fraud or error. The procedures include:

Testing whether the annual report is prepared in XHTML format;

- Obtaining an understanding of the company’s iXBRL tagging process and of internal control over the tagging process;
- Evaluating the completeness of the iXBRL tagging of the Consolidated Financial Statements including notes;

- Evaluating the appropriateness of the company’s use of iXBRL elements selected from the ESEF taxonomy and the creation of extension elements where no suitable element in the ESEF taxonomy has been identified;
- Evaluating the use of anchoring of extension elements to elements in the ESEF taxonomy; and
- Reconciling the iXBRL tagged data with the audited Consolidated Financial Statements.

In our opinion, the annual report of Novozymes A/S for the financial year January 1 to December 31, 2022 with the file name NOVOZYMES-2022-12-31-en.zip is prepared, in all material respects, in compliance with the ESEF Regulation.

*Hellerup, January 26, 2023*

### **PricewaterhouseCoopers**

Statsautoriseret Revisionspartnerselskab  
CVR No 3377 1231

### **Lars Baungaard**

State Authorized Public Accountant  
mne23331

### **Michael Groth Hansen**

State Authorized Public Accountant  
mne33228

# Financial statements for Novozymes A/S

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# Income statement, Novozymes A/S

## Income statement

DKK million	Note	2022	2021
Revenue	2.1	10,806	9,178
Cost of goods sold		(4,963)	(3,965)
<b>Gross profit</b>		<b>5,843</b>	<b>5,213</b>
Sales and distribution costs		(1,906)	(1,818)
Research and development costs		(1,773)	(1,682)
Administrative costs		(663)	(584)
Other operating income, net	2.3	1,352	1,533
<b>Operating profit / EBIT</b>		<b>2,853</b>	<b>2,662</b>
Income from investments in subsidiaries	2.4	1,529	1,228
Share of result in associates	3.5	(7)	(4)
Financial income	4.1	260	165
Financial costs	4.1	(533)	(176)
<b>Profit before tax</b>		<b>4,102</b>	<b>3,875</b>
Tax		(557)	(580)
<b>Net profit</b>		<b>3,545</b>	<b>3,295</b>
<b>Proposed appropriation of net profit</b>			
Dividend to shareholders		1,686	1,551
Retained earnings		1,859	1,744
	4.4	<b>3,545</b>	<b>3,295</b>
Proposed dividend per share, DKK		6.00	5.50

# Balance sheet, Novozymes A/S

## Assets

DKK million	Note	Dec. 31, 2022	Dec. 31, 2021
Intangible assets	3.1	4,061	4,758
Property, plant and equipment	3.2	4,501	4,273
Investments in subsidiaries	3.4	10,342	8,876
Investments in associates	3.5	223	29
Other long-term receivables	3.6	15	9
Receivables from Group enterprises		302	311
<b>Financial fixed assets</b>		<b>10,882</b>	<b>9,225</b>
<b>Fixed assets</b>		<b>19,444</b>	<b>18,256</b>
Raw materials and consumables		293	185
Work in progress		620	494
Finished goods		931	812
<b>Inventories</b>		<b>1,844</b>	<b>1,491</b>
Trade receivables		1,344	1,223
Receivables from Group enterprises		88	292
Tax receivables		66	47
Other receivables	3.6	415	209
<b>Receivables</b>		<b>1,913</b>	<b>1,771</b>
Cash at bank and in hand		213	230
<b>Current assets</b>		<b>3,970</b>	<b>3,492</b>
<b>Assets</b>		<b>23,414</b>	<b>21,748</b>

## Liabilities and equity

DKK million	Note	Dec. 31, 2022	Dec. 31, 2021
Common stock		562	564
Treasury stock		(3,348)	(3,453)
Reserve for development costs		260	238
Cash flow hedges		81	(32)
Retained earnings		13,374	11,928
Proposed dividend		1,686	1,551
<b>Total equity</b>		<b>12,615</b>	<b>10,796</b>
Provisions for deferred tax	3.7	650	483
Other provisions	3.8	264	228
<b>Provisions</b>		<b>914</b>	<b>711</b>
Lease liabilities		130	168
Credit institutions		3,619	3,680
Payables for Group enterprises		-	332
<b>Non-current liabilities</b>		<b>3,749</b>	<b>4,180</b>
Lease liabilities		47	46
Credit institutions		2,909	2,138
Trade payables		830	656
Payables for Group enterprises	3.9	1,751	2,564
Other liabilities		599	657
<b>Current liabilities</b>		<b>6,136</b>	<b>6,061</b>
<b>Liabilities</b>		<b>10,799</b>	<b>10,952</b>
<b>Liabilities and equity</b>		<b>23,414</b>	<b>21,748</b>



# Statement of equity, Novozymes A/S

DKK million	Common stock	Treasury stock	Revaluation reserve according to the equity method	Reserve for development costs	Cash flow hedges	Retained earnings	Proposed dividend	Total
<b>Equity at January 1, 2022</b>	<b>564</b>	<b>(3,453)</b>	<b>1,448</b>	<b>238</b>	<b>(32)</b>	<b>10,678</b>	<b>1,551</b>	<b>10,994</b>
Impact of changes in accounting policies			(1,448)			1,250		(198)
<b>Restated equity at January 1, 2022</b>	<b>564</b>	<b>(3,453)</b>	<b>-</b>	<b>238</b>	<b>(32)</b>	<b>11,928</b>	<b>1,551</b>	<b>10,796</b>
Net profit for the year						3,545		3,545
Capitalized development costs				22		(22)		-
Dividend paid							(1,524)	(1,524)
Dividend paid relating to treasury stock						27	(27)	-
Proposed dividend						(1,686)	1,686	-
Purchase of treasury stock		(500)						(500)
Sale of treasury stock		164						164
Write-down of common stock	(2)	441				(439)		-
Fair value adjustments					113			113
Other adjustments						21		21
<b>Equity at December 31, 2022</b>	<b>562</b>	<b>(3,348)</b>	<b>-</b>	<b>260</b>	<b>81</b>	<b>13,374</b>	<b>1,686</b>	<b>12,615</b>

# 1.1 Accounting policies

The financial statements of Novozymes A/S have been prepared in accordance with the Danish Financial Statements Act (accounting class D).

The accounting policies are consistent with those applied for the consolidated financial statements except as described below. For a description of the Group's accounting policies, please refer to the consolidated financial statements.

The accounting policies are unchanged from 2021, with the exception that subsequent measurement of investments in subsidiaries has been changed from previously following the equity method to now following the cost method. Management has reassessed the policy, and found cost price to be more appropriate as management evaluates the subsidiaries based on their ability to generate dividends.

The main effects of the policy change on the balance sheet at January 1, 2021 are that Equity has increased from DKK 9,891 million to DKK 10,063 million and Investments in subsidiaries has increased from DKK 7,157 million to DKK 7,574 million. The impact on the income statement for 2021 is an increase in income from subsidiaries from DKK 885 million to DKK 1,228 million.

No separate statement of cash flows has been prepared for Novozymes A/S; please refer to the consolidated statement of cash flows.

## Recognition and measurement in general

Income is recognized in the income statement as earned.

All costs incurred in generating the year's revenue are also recognized in the income statement, including depreciation, amortization and impairment losses.

Value adjustments of financial assets and liabilities measured at fair value or amortized cost are also recognized in the income statement.

Assets are recognized in the balance sheet when it is considered probable that future economic benefits will flow to the company and the value of the asset can be measured reliably. Liabilities are recognized in the balance sheet when they are considered probable and can be measured reliably. On initial recognition, assets and liabilities are measured at cost. Assets and liabilities are subsequently measured as described below for each item.

The recognition and measurement principles

take due account of predictable losses and risks occurring prior to the presentation of financial statements that confirm or refute the conditions prevailing at the reporting date.

## Intangible assets

The accounting policies for intangible fixed assets follow those of the Group with the exception of goodwill, which is amortized over a period of 10 years using the straight-line method.

An amount equal to the total capitalized development costs after tax is recognized under Equity in Reserve for development costs.

## Financial assets

Investments in subsidiaries are recognized initially at cost and subsequently measured using the cost method. Dividends on investments in subsidiaries are recognized in the income statement of the Parent Company in the financial year in which the dividend is declared. If the carrying amount of an investment in a subsidiary exceeds the carrying amount of the net assets in the subsidiary's financial statements, or the dividend exceeds the total comprehensive income of the subsidiary in the period in which the dividend is declared, the carrying amount of the subsidiary is tested for impairment.

Share-based payments granted to employees of the Company's subsidiaries are recognized as contributions to the investment in the respective subsidiaries.

Investments in associates are recognized initially at cost and subsequently measured using the equity method. If the equity of associates is negative and Novozymes A/S has a legal or constructive obligation to cover the their negative equity, a provision is recognized.

Share purchase liabilities are obligations to invest in subsidiaries and are disclosed as a contractual obligation. The derivative embedded in the share purchase obligation is measured at fair value through the income statement.

## Dividend

The dividend proposed for the financial year is shown as a separate item under Equity.

## Treasury stock

Treasury stock is used to reduce the common stock and to hedge employees' exercise of granted stock awards and stock options.

Note section 2

## 2.1 Revenue

DKK million	2022	2021
Geographical distribution:		
Denmark	211	204
Rest of Europe, Middle East & Africa	5,662	5,286
North America	1,878	1,289
Latin America	1,109	796
Asia Pacific	1,946	1,603
<b>Revenue</b>	<b>10,806</b>	<b>9,178</b>

Reference is made to Note 2.1 to the consolidated financial statements segment information.

## 2.2 Employee costs

DKK million	2022	2021
Wages and salaries	1,965	1,831
Pensions - defined contribution plans	196	187
Other social security costs	23	19
Other employee costs	181	160
<b>Employee costs</b>	<b>2,365</b>	<b>2,197</b>
Average number of employees in Novozymes A/S	2,849	2,721

Reference is made to Note 6.1 to the consolidated financial statements concerning

remuneration of the Board of Directors and the Executive Leadership Team.

## 2.3 Other operating income, net

DKK million	2022	2021
Royalty income relating to subsidiaries	1,310	1,213
Sale of intellectual property license	-	240
Net gain from divestment of building held for sale	-	60
Other operating income	42	20
<b>Other operating income</b>	<b>1,352</b>	<b>1,533</b>

## 2.4 Income from investments in subsidiaries

DKK million	2022	2021
Dividends from subsidiaries	1,262	1,228
Reversal of impairments of subsidiaries	267	-
<b>Income from investments in subsidiaries</b>	<b>1,529</b>	<b>1,228</b>

Note section 3

## 3.1 Intangible assets

DKK million	2022				Total	2021
	Goodwill	Acquired patents, licenses and know-how, etc.	Completed IT development projects	IT development projects in progress		Total
Cost at January 1	4,375	3,023	820	112	8,330	6,268
Additions during the year	-	-	21	102	123	2,062
Transfers to/(from) other items	-	-	78	(78)	-	-
<b>Cost at December 31</b>	<b>4,375</b>	<b>3,023</b>	<b>919</b>	<b>136</b>	<b>8,453</b>	<b>8,330</b>
Amortization and impairment losses at January 1	(1,490)	(1,457)	(625)		(3,572)	(2,721)
Amortization for the year	(512)	(213)	(95)		(820)	(824)
Impairment losses	-	-	-		-	(27)
<b>Amortization and impairment losses at December 31</b>	<b>(2,002)</b>	<b>(1,670)</b>	<b>(720)</b>		<b>(4,392)</b>	<b>(3,572)</b>
<b>Carrying amount at December 31</b> <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">B/S</span>	<b>2,373</b>	<b>1,353</b>	<b>199</b>	<b>136</b>	<b>4,061</b>	<b>4,758</b>

### Impairment

No impairment loss was recognized in 2022.

In 2021, an impairment loss of DKK 27 million on a know-how asset was recognized as the use of this know-how ceased in 2021. The impairment loss has been recognized in Research and development costs.

Note section 3

## 3.2 Property, plant and equipment

DKK million	2022				Total	2021
	Land and buildings	Production equipment and machinery	Other equipment	Property, plant and equipment under construction		Total
Cost at January 1	3,600	5,369	1,393	284	10,646	10,391
Additions during the year	38	22	54	513	627	453
Disposals during the year	(154)	(21)	(20)	-	(195)	(198)
Transfers to/(from) other items	42	89	58	(189)	-	-
<b>Cost at December 31</b>	<b>3,526</b>	<b>5,459</b>	<b>1,485</b>	<b>608</b>	<b>11,078</b>	<b>10,646</b>
Depreciation and impairment losses at January 1	(1,666)	(3,828)	(879)		(6,373)	(6,081)
Depreciation for the year	(81)	(196)	(111)		(388)	(423)
Impairment losses	-	-	-		-	(15)
Disposals during the year	145	20	19		184	146
<b>Depreciation and impairment losses at December 31</b>	<b>(1,602)</b>	<b>(4,004)</b>	<b>(971)</b>		<b>(6,577)</b>	<b>(6,373)</b>
<b>Carrying amount at December 31</b> <span style="float: right;">B/S</span>	<b>1,924</b>	<b>1,455</b>	<b>514</b>	<b>608</b>	<b>4,501</b>	<b>4,273</b>

### Capitalized interest

Interest of DKK 0 million was capitalized under Additions during the year (2021: DKK 1 million). Capitalization rate: 0.8% (2021: 0.5%).

Land and buildings with an aggregate carrying amount of DKK 1,366 million (2021: DKK 1,453 million) were pledged as security to credit institutions in respect of mortgage loans expiring in 2029 and 2039.

### Contractual obligations

Contractual obligations to third parties relating to property, plant and equipment amount to DKK 259 million (2021: DKK 84 million).

### Impairment

In 2021, an impairment loss of DKK 15 million on a building was recognized and included in Cost of goods sold.

Note section 3

## 3.3 Leases

DKK million	2022	2021
Land and buildings	38	46
Plant and machinery	87	92
Other equipment	43	68
<b>Carrying amount of lease assets</b>	<b>168</b>	<b>206</b>

Additions to lease assets during 2022 amounted to DKK 9 million (2021: DKK 76 million).

### Maturity analysis of the lease liability

DKK million	2022	2021
<b>Lease liability</b>		
Less than 1 year	47	46
Between 1 and 5 years	61	92
More than 5 years	71	80
<b>Undiscounted lease liability at December 31</b>	<b>179</b>	<b>218</b>

DKK million	2022	2021
<b>Amounts recognized in profit or loss</b>		
Interest on lease liabilities	4	4
<b>Depreciation of lease assets per asset class</b>		
Land and buildings	9	10
Plant and machinery	6	6
Other equipment	30	27
<b>Depreciation of lease assets</b>	<b>45</b>	<b>43</b>

Note section 3

## 3.4 Investments in subsidiaries

DKK million	2022
Cost at January 1, 2022	10,887
Additions during the year	1,387
Disposals during the year	(188)
<b>Cost at December 31, 2022</b>	<b>12,086</b>
Impairment losses at January 1, 2022	(2,011)
Reversal of impairment losses	267
<b>Impairment losses at December 31, 2022</b>	<b>(1,744)</b>
<b>Carrying amount at December 31, 2022</b> <span>B/S</span>	<b>10,342</b>

Reference is made to Note 6.9 to the consolidated financial statements concerning investments in subsidiaries, joint operations and associates.

A partial reversal of the impairment of Novozymes Biopharma A/S was made in 2022 due to the gain from the divestment of the minority ownership in Albumedix, held by the company.

## 3.5 Investments in associates

DKK million	2022
Cost at January 1, 2022	128
Additions during the year	201
<b>Cost at December 31, 2022</b>	<b>329</b>
Revaluation reserve at January 1, 2022	(99)
Share of net profit/(loss)	(7)
<b>Revaluation reserve at December 31, 2022</b>	<b>(106)</b>
<b>Carrying amount at December 31, 2022</b> <span>B/S</span>	<b>223</b>

## 3.6 Other receivables

DKK million	2022	2021
Prepaid expenses	206	115
Derivatives	142	75
Other receivables	82	28
<b>Other receivables at December 31</b>	<b>430</b>	<b>218</b>
Recognized in the balance sheet as follows:		
Non-current <span>B/S</span>	15	9
Current <span>B/S</span>	415	209
<b>Other receivables at December 31</b>	<b>430</b>	<b>218</b>



Note section 3

## 3.7 Deferred tax

DKK million	Deferred tax assets		Deferred tax liabilities	
	2022	2021	2022	2021
Intangible assets	-	-	(295)	(236)
Property, plant and equipment	-	-	(312)	(328)
Inventories	-	-	(30)	(34)
Stock options	51	188	-	-
Other	-	-	(64)	(73)
	<b>51</b>	<b>188</b>	<b>(701)</b>	<b>(671)</b>
Offsetting items	(51)	(188)	51	188
<b>Deferred tax at December 31</b>	<b>-</b>	<b>-</b>	<b>(650)</b>	<b>(483)</b>

DKK million	2022	2021
Deferred tax at January 1	(483)	(682)
Prior-year adjustments	21	35
Tax related to the income statement	(26)	(10)
Tax on equity items	(162)	174
<b>Deferred tax at December 31</b>	<b>(650)</b>	<b>(483)</b>

## 3.8 Other provisions

Other provisions include contingent consideration related to the acquisition of PrecisionBiotics Group.

Reference is made to Note 3.6 to the consolidated financial statements concerning contingent consideration, as the figures and information related to PrecisionBiotics Group applying to Novozymes A/S are identical to the information provided there.

## 3.9 Payables for Group enterprises

Current payables for Group enterprises includes an internal transfer of assets from Microbiome Labs.

Reference is made to Note 3.6 to the consolidated financial statements concerning contingent consideration, as the figures and information related to Microbiome Labs applying to Novozymes A/S are identical to the information provided there.

The payable of DKK 158 million falls due in 2023 and is contingent on the final purchase price for Microbiome Labs.

Fair value is assessed by using the earn-out from the realized sales in 2022 discounted at a rate of 8%. Fair value adjustment of DKK 223 million is recognized as Financial income (2021:DKK 62 million).

Note section 4

## 4.1 Financial income and costs

DKK million	2022	2021
Interest income relating to subsidiaries	23	22
Fair value adjustment of payables relating to subsidiaries	223	62
Other financial income	14	81
<b>Financial income</b>	<b>260</b>	<b>165</b>
Interest costs relating to subsidiaries	(32)	(18)
Other financial costs	(501)	(158)
<b>Financial costs</b>	<b>(533)</b>	<b>(176)</b>

## 4.2 Credit institutions

DKK million	2022	2021
Long-term debt to credit institutions falling due after 5 years	1,318	1,253

Undrawn committed credit facilities amounted to DKK 17,502 million at December 31, 2022 (2021: DKK 3,785 million), all of which expire in 2023–2027. Reference is made to Note 5.1 to the

consolidated financial statements concerning undrawn committed credit facilities, as the information applying to Novozymes A/S are identical to the information provided there.

## 4.3 Derivatives

Reference is made to Note 5.4 to the consolidated financial statements concerning derivatives, as the figures and information applying to Novozymes A/S are identical to the information provided there.

## 4.4 Proposed appropriation of net profit

DKK million	2022	2021
<b>Proposed appropriation of net profit</b>		
Dividend to shareholders	1,686	1,551
Retained earnings	1,859	1,744
<b>Net profit</b>	<b>3,545</b>	<b>3,295</b>

Note section 5

## 5.1 Related party transactions

### Transactions

DKK million	2022	2021
<b>Novo Holdings A/S</b>		
Sales	-	1
Dividend payment to Novo Holdings A/S	396	382
<b>The Novo Nordisk Group</b>		
Sales	113	84
Purchases	(78)	(115)
<b>The NNIT Group</b>		
Purchases	(34)	(39)
<b>The Chr. Hansen Group</b>		
Sales	114	80
<b>Synergia Life Sciences Pvt. Ltd.**</b>		
Purchases	(36)	-
Royalty income	6	-
Royalty expenses	(10)	-
<b>Microbiogen Pty. Ltd.*</b>		
Purchases	(38)	(25)
<b>MagnaBioAnalytics LLC*</b>		
Purchases	(2)	(25)

In 2021, Novozymes purchased from Novo Holdings A/S 765,000 of its own B shares with the approval of the Board of Directors, at a price of DKK 338 million. The transaction was based

on the market price. In 2022, Novozymes has not sold or purchased any of its own B shares to/from Novo Holdings A/S.

### Outstanding balances

DKK million	2022	2021
<b>The Novo Nordisk Group</b>		
Receivables	10	10
Payables	(79)	(88)
<b>The NNIT Group</b>		
Payables	(7)	(9)
<b>The Chr. Hansen Group</b>		
Receivables	20	5
<b>Synergia Life Sciences Pvt. Ltd.**</b>		
Receivables	6	-
Payables	(13)	-
<b>Microbiogen Pty. Ltd.*</b>		
Payables	(12)	(7)
<b>MagnaBioAnalytics LLC*</b>		
Receivables	5	-

\* Associate of Novozymes A/S

\*\* Novozymes A/S own 60% of Synergia Life Sciences Pvt. Ltd.

There were no transactions with related parties other than the transactions described herein and the ordinary remuneration of the Board of Directors and Executive Leadership Team, which is presented in Note 6.1 in the consolidated financial statements.

Reference is made to Note 6.4 to the consolidated financial statements concerning transactions with related parties.

Novozymes A/S is included in the consolidated financial statements of Novo Nordisk Foundation.

Note section 5

## 5.2 Fees to statutory auditors

DKK million	2022	2021
Statutory audit	6	6
Other assurance engagements	-	-
Tax advisory services	2	2
Other services	10	-
<b>Fees to statutory auditors</b>	<b>18</b>	<b>8</b>

Reference is made to Note 6.6 to the consolidated financial statements concerning fees to statutory auditors.

## 5.3 Common stock and treasury stock

Reference is made to Note 5.5 to the consolidated financial statements concerning common stock and treasury stock.

## 5.4 Contingent liabilities and pending litigation

DKK million	2022	2021
<b>Other guarantees</b>		
Other guarantees and commitments to related companies	343	344
Other guarantees and commitments	546	176

### Pending litigation and arbitration

Reference is made to Note 6.3 to the consolidated financial statements concerning pending litigation and arbitration.

### Other guarantees and commitments

The increase in other guarantees and commitments is related to the proposed combination of Novozymes and Chr. Hansen.

### Contractual obligations

Contractual obligations to third parties relating to property, plant and equipment are described in Note 3.2.

### Contingent liabilities

Novozyymes A/S has a contingent liability to purchase the remaining 40% of the shares in Synergia Life Sciences in 2025. Reference is made to Note 6.5 to the consolidated financial statements concerning non-controlling interests.

In the unlikely event that the proposed combination of Novozymes and Chr. Hansen does not obtain regulatory approval, Novozymes may have to pay a break-up fee of up to DKK 2,342 million (EUR 315 million).

## 5.5 Events after the reporting date

Reference is made to Note 6.8 to the consolidated financial statements concerning events after the reporting date.

# Glossary (Part of the Management Review)

## FINANCIAL TERMS

### Earnings per share (diluted)

Net profit (attributable to shareholders of Novozymes A/S) divided by the weighted average number of shares outstanding (diluted).

### Operating profit (EBIT)

Profit before interest and tax.

### EBIT margin

Profit before interest and tax as a percentage of revenue.

### Operating profit (EBIT) before special items

Profit before special items, interest and tax.

### EBIT margin before special items

Profit before special items, interest and tax as a percentage of revenue.

### EBITDA

Profit before interest, tax, depreciation and amortization.

### EBITDA margin

Profit before interest, tax, depreciation and amortization as a percentage of revenue.

### Economic profit

Economic profit is defined as adjusted operating profit (NOPAT) less (average invested capital \* WACC).

### Effective tax rate

Income tax expense as a percentage of profit before tax.

### Equity ratio

Total equity as a percentage of total assets at year end.

### Free cash flow before acquisitions

Cash flow from operating activities less cash flow from investing activities, business acquisitions, divestments, purchase and sale of financial assets.

### Invested capital

Total assets excluding interest-bearing assets and minority investments less non-interest-bearing liabilities.

### iXBRL tags

iXBRL tags is hidden meta-information embedded in the source code of an XHTML document in accordance with the Inline XBRL specification, which enables the conversion of XHTML-

formatted information into a machine-readable XBRL data record by appropriate software.

### iXBRL Taxonomy

Taxonomy is an electronic dictionary of business reporting elements used to report business data. A taxonomy element is an element defined in a taxonomy that is used for the machine-readable labeling of information in an XBRL data record.

### Net interest-bearing debt (NIBD)

The market value of interest-bearing liabilities (financial liabilities) less the market value of cash at bank and in hand and other readily convertible interest-bearing current assets.

### Net interest-bearing debt-to-EBITDA (NIBD/EBITDA)

Net interest-bearing debt as a percentage of last 12 months' EBITDA.

### Net working capital

Current assets less current liabilities used in, or necessary for, the company's operations. The main components are inventories, trade receivables and trade payables.

### Adjusted operating profit after tax (NOPAT)

Operating profit adjusted for exchange gains/losses, share of profit in associates less tax on adjusted operating profit using the effective tax rate.

### NOPAT before special items

EBIT before special items adjusted for exchange gains/losses, share of profit in associates less tax on adjusted EBIT before special items using the effective tax rate.

### Operating costs

Operating costs consist of Sales and distribution costs, Research and development costs and Administrative costs.

### Organic sales growth

Sales growth from existing business, excluding divestments, measured in local currency. For acquisitions, pro forma sales for the prior year are included in the calculation.

### Return on equity

Net profit attributable to shareholders' of Novozymes A/S as a percentage of average Equity attributable to shareholders' of Novozymes A/S.

# Glossary (Part of the Management Review)

## Return on invested capital (ROIC)

Adjusted operating profit (NOPAT) after tax for the last 12 months as a percentage of average invested capital.

## Return on invested capital (ROIC) before special items

NOPAT before special items after tax for the last 12 months as a percentage of average invested capital.

## Special items

Special items include income and costs related to the proposed combination of Novozymes and Chr. Hansen.

## XHTML

XHTML (eXtensible HyperText Markup Language) is a text-based markup language used to structure and mark up content such as text, images, and hyperlinks in documents that are displayed as Web pages in an updated standard Web browser like Chrome and Internet Explorer.

## OTHER TERMS

### CO<sub>2</sub>

The term "CO<sub>2</sub>" is used to represent all greenhouse gasses (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O etc.) on an equivalency basis in this report.

### Climate neutral or net-zero

Climate neutral or net-zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. For Novozymes, the state of net-zero emissions covers both our operations and supply chain, as defined by our science-based targets.

The International Panel on Climate Change (IPCC) defines climate neutrality as a state in which human activities result in no net effect on the climate system.

### Freshwater

Water characterized by having low concentrations of dissolved solids acceptable for domestic, municipal or agricultural uses. For Novozymes, our freshwater withdrawal includes both drinking water, industrial water and steam.

## Gender balance

Gender balance means that, as a minimum, we will have 45% women and 45% men across all professionals and in senior management.

## Scope 3

The Greenhouse Gas Protocol defines Scope 3 emissions as all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. For Novozymes, our Scope 3 boundary is composed of Category 1 (purchased goods and services), Category 3 (fuel- and energy-related activities (not included in scope 1 or 2), Category 4 (upstream transportation and distribution) and Category 6 (business travel).

## Zero waste

Defined as (1) ≥ 99% (by weight) of the biomass is re-circulated as compost, fertilizer, feedstock for biogas or the like; and (2) ≥ 90% (by weight) of hazardous and nonhazardous waste is either composted, reused, recycled or incinerated with energy recovery.

# About the Report

Novozymes' reporting ambition is to provide a single integrated report connecting our business model, strategy, targets and performance through integrated financial and nonfinancial data.

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## Reporting and audits

The website contains links to a PDF version of The Novozymes Report 2022 as well as the XHTML version submitted to the Danish Financial Supervisory Authority.

PwC has not audited the Management's Review, nor the sections of the report under the headings: The big picture, Our business and Governance.

The audit covers financial, environmental, social and governance data. See also the [Independent Auditor's Reports](#) in the statements section of The Novozymes Report.

The report has been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the EU, further requirements in the Danish Financial Statements Act and additional requirements of Nasdaq Copenhagen A/S for the presentation of financial statements by listed companies. It is also inspired by the Task Force on Climate Related Financial Disclosures (TCFD) and GRI Framework. See [Basis of reporting](#) in the report for more details.

## Forward-looking statements


The Novozymes Report contains forward-looking statements, including statements about future events, future financial performance, plans, strategies and expectations. Forward-looking statements are associated with words such as,

but not limited to, "believe", "anticipate", "expect", "estimate", "intend", "plan", "project", "could", "may", "might" and other words of similar meaning.

Forward-looking statements are by their very nature associated with risks and uncertainties that may cause actual results to differ materially from expectations, both positively and negatively. These risks and uncertainties may, among other things, include unexpected developments in i) the ability to develop and market new products; ii) the demand for Novozymes' products, market-driven price decreases, industry consolidation, and launches of competing products or disruptive technologies in Novozymes' core business areas; iii) the ability to protect and enforce the company's intellectual property rights; iv) significant litigation or breaches of contract; v) the materialization of the company's growth platforms; vi) political conditions, such as acceptance of enzymes produced by genetically modified organisms; vii) global economy and capital market conditions, including, but not limited to, currency exchange rates (USD/DKK and EUR/DKK in particular, but not exclusively), interest rates and inflation; viii) significant price decreases for input and materials that compete with Novozymes' biological solutions. The company undertakes no obligation to update any forward-looking statements as a result of future developments or new information.



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Novozymes Report 2022 on  
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