

Financial highlights



4%

Organic sales growth
(2017: 4%)

Total sales in 2018 were DKK 14,390 million, an increase of 4% organically and a decrease of 1% in DKK. Bioenergy and Food & Beverages were the main contributors to organic sales growth.



28.3%

EBIT margin
(2017: 27.9%)

The EBIT margin was 28.3%, 0.4 percentage point higher than in 2017. Excluding the one-time costs incurred in 2017 relating to organizational changes and the divestment of Albumedix, the EBIT margin in 2018 was 0.7 percentage point lower than in 2017.



3%

Net profit growth
(2017: 2%)

Net profit grew by 3% to DKK 3,227 million in 2018, up from DKK 3,120 million in 2017. This was driven by both a lower tax rate and lower net financial costs.



24.2%

ROIC (2017: 25.6%)

Return on invested capital (ROIC) including goodwill was 24.2%, compared with 25.6% at year-end 2017. The lower ROIC was mainly due to higher net invested capital.

Key figures

	2018 realized	2018 outlook ¹
Sales growth, organic	4%	4-6%
EBIT margin	28.3%	~28.0%
Net profit growth	3%	~0%
Net investments excl. acquisitions, DKKbn	1.4	1.3-1.5
Free cash flow before acquisitions, DKKbn	2.3	2.3-2.6
ROIC (including goodwill)	24.2%	24-25%
Avg. USD/DKK	632	600

1. Outlook guided as of February 7, 2018.

> **Outlook 2019**

> **See more details on performance in Accounts and performance**

Sustainability highlights



23%

Renewable energy
(2017: 24%)

Energy from renewable sources accounted for 23% of our total energy consumption in 2018. In Denmark and Brazil, we purchase our electricity from renewable sources.



See more details in
Accounts and performance



In 2018, our customers saved an estimated 88 million tons of CO₂ emissions by applying Novozymes' products. The savings achieved are equivalent to taking approximately 37 million cars off the road.



78

Employee development
(New in 2018)

In 2018, we implemented TunedIn, a new employee survey and dialogue tool. The survey is used in conjunction with team talks throughout the company about how we work and grow together. The survey shows an employee development score of 78, which meets our target of 75 or above.



30%

Women in senior management
(2017: 26%)

In 2018, we exceeded our target of 27% for women in senior management (directors or higher). This is a result of our continued focus on improving diversity.

Key figures

	2018 realized	2018 target
Estimated reduction in CO ₂ emissions through our customers' application of our products, in million tons	88	≥ 80
Growth in absolute water usage	1%	< organic sales growth
Growth in absolute energy usage	1%	< organic sales growth
Growth in absolute CO ₂ emissions	7%	≤ organic sales growth
Renewable energy	23%	23%
Occupational accidents ¹	2.4	≤ 1.5
Employee absence	2.1%	≤ 2.0%
Women in senior management	30%	≥ 27%
Employee development	78	≥ 75
Customer satisfaction ²	50	≥ 40
RobecoSam rating ³	n.a.	Medal

1. Per million working hours.

2. Defined as Net Promoter Score.

3. Novozymes canceled this target in 2018.

Sales by geography

North America

North America was solid overall with 5% organic sales growth in 2018 compared with 2017. Bioenergy and Agriculture & Feed were the main growth drivers.

5%

Organic sales growth



34%
of sales

Latin America

Organic sales growth in Latin America was 6% in 2018 compared with 2017, driven by Bioenergy and Food & Beverages, whereas Household Care was lower.

6%

Organic sales growth



10%
of sales

Europe, the Middle East & Africa

Organic sales growth in 2018 compared with 2017 was soft across most industries. Partly due to weak markets in the Middle East, Household Care was particularly soft, and Food & Beverages posted low growth.

1%

Organic sales growth



36%
of sales

Asia Pacific

Food & Beverages and Household Care were the main drivers of the 5% organic sales growth in 2018 compared with 2017.

5%

Organic sales growth



20%
of sales

Sales by industry



Household Care



Food & Beverages



Bioenergy

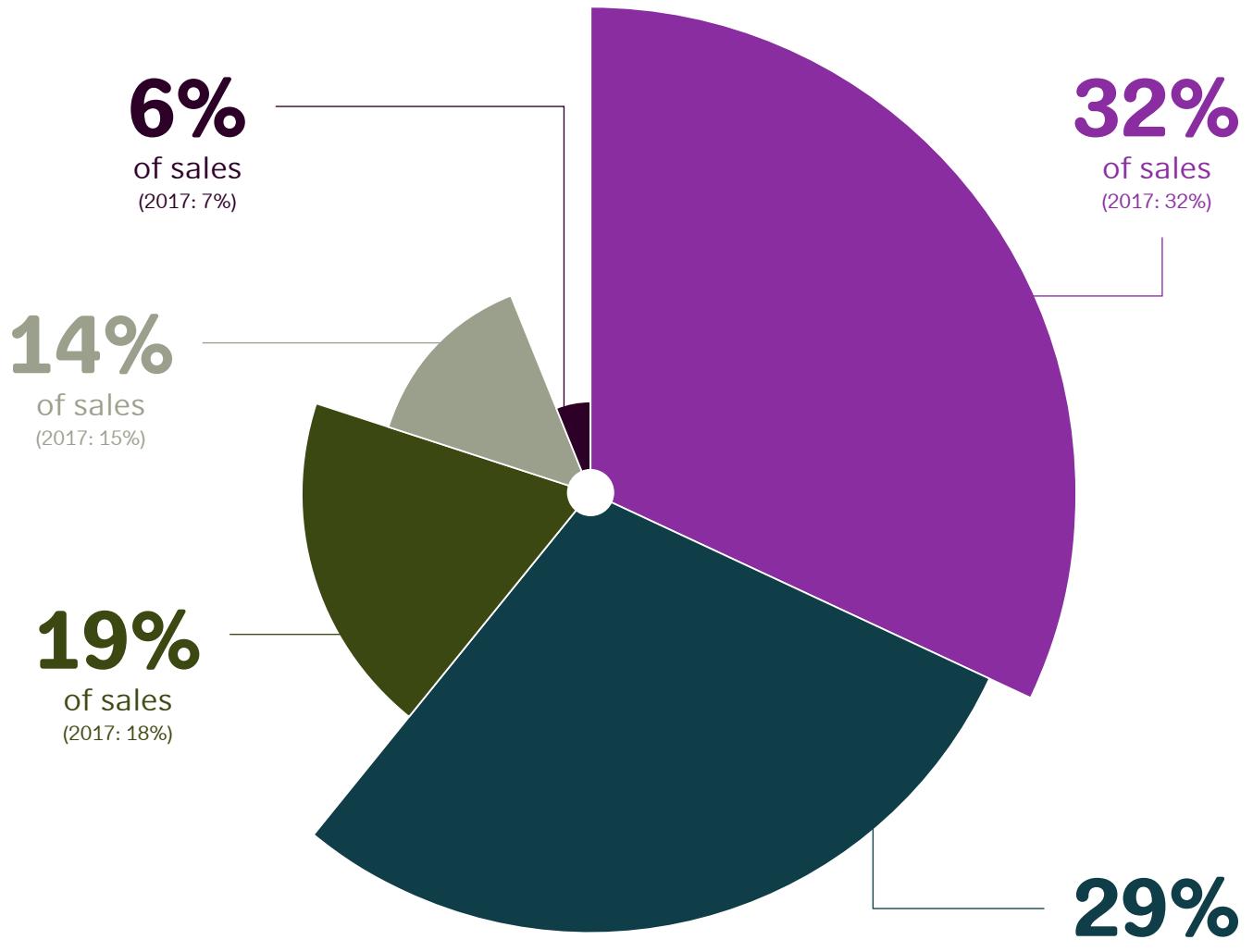


Agriculture & Feed



Technical & Pharma

Three out of five of Novozymes' industries grew in 2018. Bioenergy delivered strong growth, and Food & Beverages and Agriculture & Feed also delivered growth. Household Care was flat, and sales declined in Technical & Pharma. Novozymes holds an estimated 48% share of the global enzyme market.



Organic sales growth

0%

5%

12%

3%

-6%

Household Care



Where we make a difference
Our enzymes enable manufacturers to produce laundry and cleaning products that offer better performance with reduced environmental impact.

2018 results

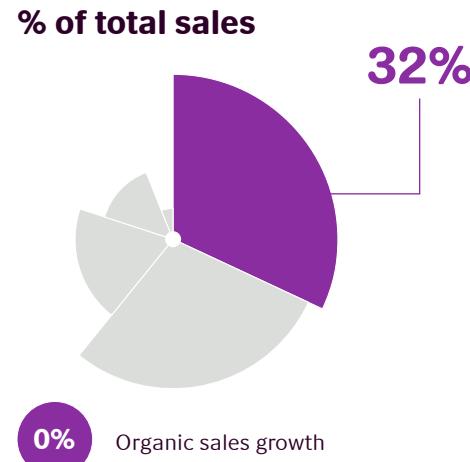
Sales to the Household Care industry were flat organically and down 2% in DKK compared with 2017. Sales were a bit softer than initially expected due to challenging Middle Eastern markets in the second half of the year, as well as a truck strike in Brazil and a customer's North American distribution issues in the second quarter of the year.

Sales to local customers maintained their good momentum throughout the year, and sales of enzymes for dishwashing solutions continued to deliver strong performance.

The emerging markets delivered solid performance driven by local customers. In China, penetration with enzymatic solutions for laundry detergents continues as the demand for liquid detergent formulations continues to grow.

As expected, some of our global customers continued to reduce enzyme dosing during 2018, particularly in the developed markets.

The rollout of the first product from the freshness platform is tracking according to plan although, as expected, the contribution from the platform was minor in 2018.



2019 outlook

Organic sales growth is expected to be supported by a broader rollout for the freshness platform and increased penetration in emerging markets, where we tap into consumer trends with our innovative enzymes for both liquid and powder detergents. The development of the freshness platform is tracking according to plan, and we expect to ship to more emerging markets through the year and to Europe in late 2019. The dose reductions at some of our large customers are likely to continue, although at a lower level. This puts a dampener on growth. We expect low-single-digit organic sales growth for Household Care, including annualization of the Middle Eastern impact.



Read more about our Household Care solutions on [Novozymes.com](#)

Product launches

- ✓ **Licheninase** – A new enzyme launched for automatic dishwashing, targeting dried-in cereals
- ✓ **Lipex® Evity 200 L** – New premium liquid lipase for the removal of grease stains

Key industry trends

- Growth in the liquid and unit dose market, driven by consumer convenience and stronger commercial focus on these categories
- Rising demand for Household Care solutions tailored to emerging-market needs, such as hot and humid conditions and mild handwashing alternatives
- Strong interest in freshness and odor reduction technologies and claims

SDG impact



Our solutions contribute to reducing aquatic pollution, among other things.



Read more about our contributions to the SDGs

Food & Beverages



Where we make a difference
Enzymes enable producers to diversify their product ranges and develop products that stay fresh longer.

2018 results

Food & Beverages sales grew by 5% organically and by 2% in DKK.

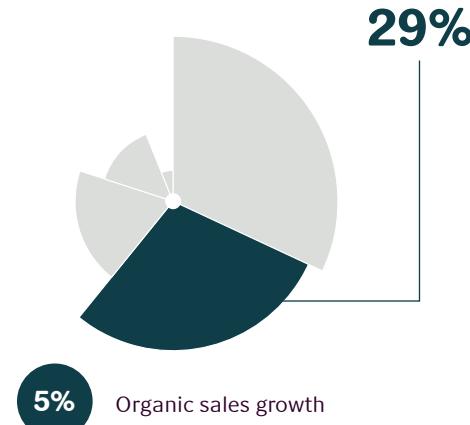
Food & Beverages delivered solid and wide-ranging growth. Both emerging and developed markets posted growth in 2018 compared with 2017. Food & nutrition and beverages were the most significant growth contributors, while baking experienced a

slight decline. This decline was caused by two main factors: the planned price decreases in the North American freshkeeping market and loss of business in the Middle East. However, sales of baking enzymes to the European and African markets performed well, almost offsetting the negatives.



Read more about our Food & Beverages solutions on Novozymes.com

% of total sales



Key industry trends

- Consumer focus on health, wellness and natural products
- Increase in raw material costs and focus on production process optimization
- Customers consolidating operations in order to increase overall efficiency
- Consumer focus on brands using local produce and/or catering to specific local taste, tradition and cultures

2019 outlook

Organic sales growth is expected to be driven by continued step-up in commercial presence, especially in the emerging markets, as well as by ramp-up of newly launched innovations, such as Frontia® and Palmora®. There is a modest positive expectation for baking, including planned price decreases in the US coming to an end in the first quarter. Food & nutrition is expected to continue its good momentum, supported by the enduring health awareness trends. We expect continued solid growth across all industries with mid-single-digit organic sales growth, including annualization of the Middle Eastern impact.

"The world needs to produce 70% more food by 2050 than today to feed a growing global population. Our enzymes can reduce food waste, replace food additives, and improve the quality and nutritional value of food," says Andrew Fordyce, Executive Vice President, Food & Beverages.

SDG impact



Our solutions contribute to making food production systems more sustainable.



Read more about our contributions to the SDGs

Bioenergy



2018 results

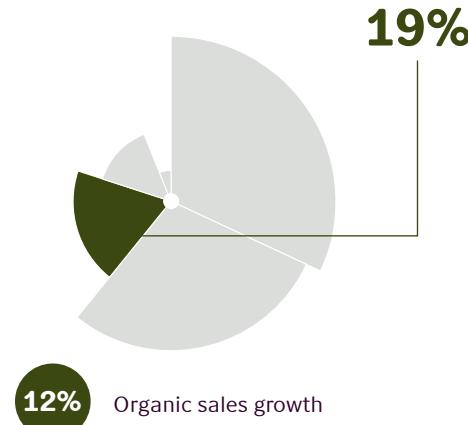
Sales to Bioenergy grew by 12% organically and by 6% in DKK compared with 2017.

The strong growth within enzymes for conventional biofuels continued throughout the year, driven by broad technology offerings and tailored customer solutions. Our newly launched yeast products, Innova® Drive and Innova® Lift, posted good growth in the second half of the year, albeit from a low base. Latin America continued to perform well, supported by new starch-based ethanol production capacity.

US and global ethanol production is estimated to be up ~1% in 2018 compared with 2017. Ethanol producer margins were under pressure, and inventory levels elevated.

"Our products for Bioenergy convert plant materials and waste to biofuels. Using these biofuels reduces CO₂ emissions by 50-90% compared with conventional gasoline," says Tina Sejersgård Fanø, Executive Vice President, Agriculture & Bioenergy.

% of total sales



Product launches

✓ **Innova® Drive** – Novozymes' first launch within yeast for conventional biofuels.

Innova® Drive is aimed at ethanol plants with short fermentation times

✓ **Innova® Lift** – The second product from our yeast platform. Innova® Lift is aimed at ethanol plants with longer fermentation times

Key industry trends

- Growing calls for lower CO₂ emissions in the transportation sector, driving demand for ethanol
- Political push in favor of biofuels in more regions
- Volatility in commodity prices, affecting customer margins

SDG impact



Novozymes promotes the development and deployment of low-carbon transportation fuels.



Read more about our contributions to the SDGs

Agriculture & Feed



2018 results

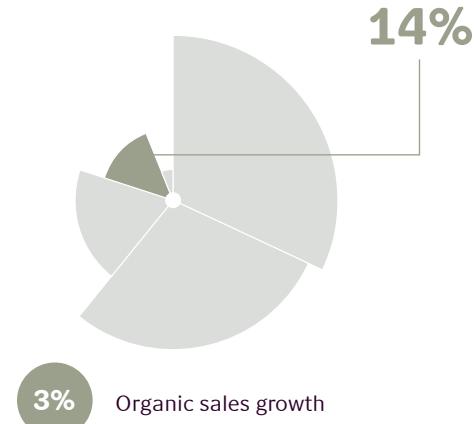
In Agriculture & Feed, sales increased by 3% organically and were down 3% in DKK compared with 2017.

BioAg performed very well in 2018. While agricultural markets in general were challenged by low crop prices and poor farm economics, growth in Novozymes' BioAg business was driven mainly by the combined Acceleron® B-300 SAT/B-360 ST corn product for the US market.

Sales to the feed industry declined during 2018, as challenging feed enzyme markets, especially in Latin America, put pressure on volumes. Animal health sales developed well across the major geographies.

During 2018, Novozymes recognized DKK 169 million of deferred income as revenue, compared with DKK 202 million in 2017. Deferred income does not impact the calculation of organic sales growth rates; it impacts realized sales growth in DKK but has no cash flow impact.

% of total sales



2019 outlook

Sales to the agriculture-related markets are subject to uncertainty, due primarily to global farm economics and trade-related concerns. We are negotiating with Bayer regarding the future setup of the BioAg business, which is also a source of uncertainty. Feed sales are expected to grow modestly for the year. We expect a low-single-digit decrease to a mid-single-digit increase in organic sales.

Novozymes expects to recognize roughly DKK 113 million of the deferred income in BioAg as revenue in 2019.



Read more about our Agriculture & Feed solutions on [Novozymes.com](#)

Product launches

- ✓ **Acceleron® B-360 ST** – A biological seed treatment that promotes symbiosis between microbes and corn plants, strengthening root systems and increasing plants' access to nutrients
- ✓ **Balancius™** – A novel enzyme that improves digestion and nutrition in chickens

Key industry trends

- Consumer focus on health, wellness and natural products
- Sensitivity to fluctuations in commodity prices among farmers
- Consolidation of large agricultural companies to increase overall scale and efficiency

SDG impact



Our solutions support sustainable food production and resilient agricultural practices.



Read more about our contributions to the SDGs

Technical & Pharma



2018 results

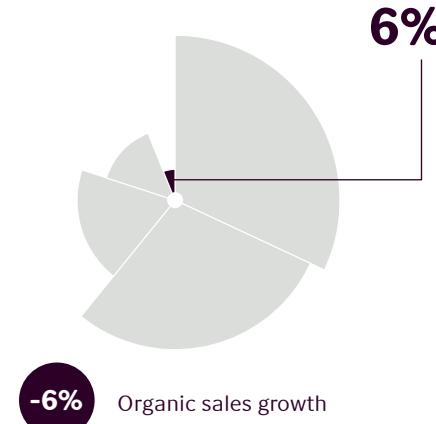
Sales to Technical & Pharma declined by 6% organically and by 22% in DKK in 2018. The divestment of Albulomedix late 2017 impacted revenue negatively by DKK ~150 million. The divestment has no impact on organic sales growth.

Performance was weak across the various technical industries, as well as in Pharma. Sales to the textile industry were below expectations, following weak performance in the Middle East.

2019 outlook

The business was impacted by the challenging markets in the Middle East during the second half of 2018, a situation that is expected to continue in the first half of 2019. We expect low-single-digit organic sales growth for the year, including annualization of the Middle Eastern impact.

% of total sales



Key industry trends

- Continuous focus on process optimization and cost reduction
- Water scarcity driving demand for solutions that reduce water consumption, improve water quality and clean wastewater

SDG impact



Our solutions contribute to reducing aquatic pollution and improving wastewater treatment.



[Read more about our contributions to the SDGs](#)

Product launches

✓ **BioSec®** – Novozymes' first product for sludge dewatering. BioSec® is aimed at municipal wastewater treatment

✓ **Cellusoft® Cold** – Low-temperature cellulase for liquid denim abrasion and garment biopolishing



Answering the world's call for cleaner water

Solving the world's water problems presents a monumental challenge for society. As part of its Sustainable Development Goals (SDGs), the United Nations has identified Clean Water & Sanitation as Goal 6, recognizing that water is the key to unlocking progress in several of the other SDGs.

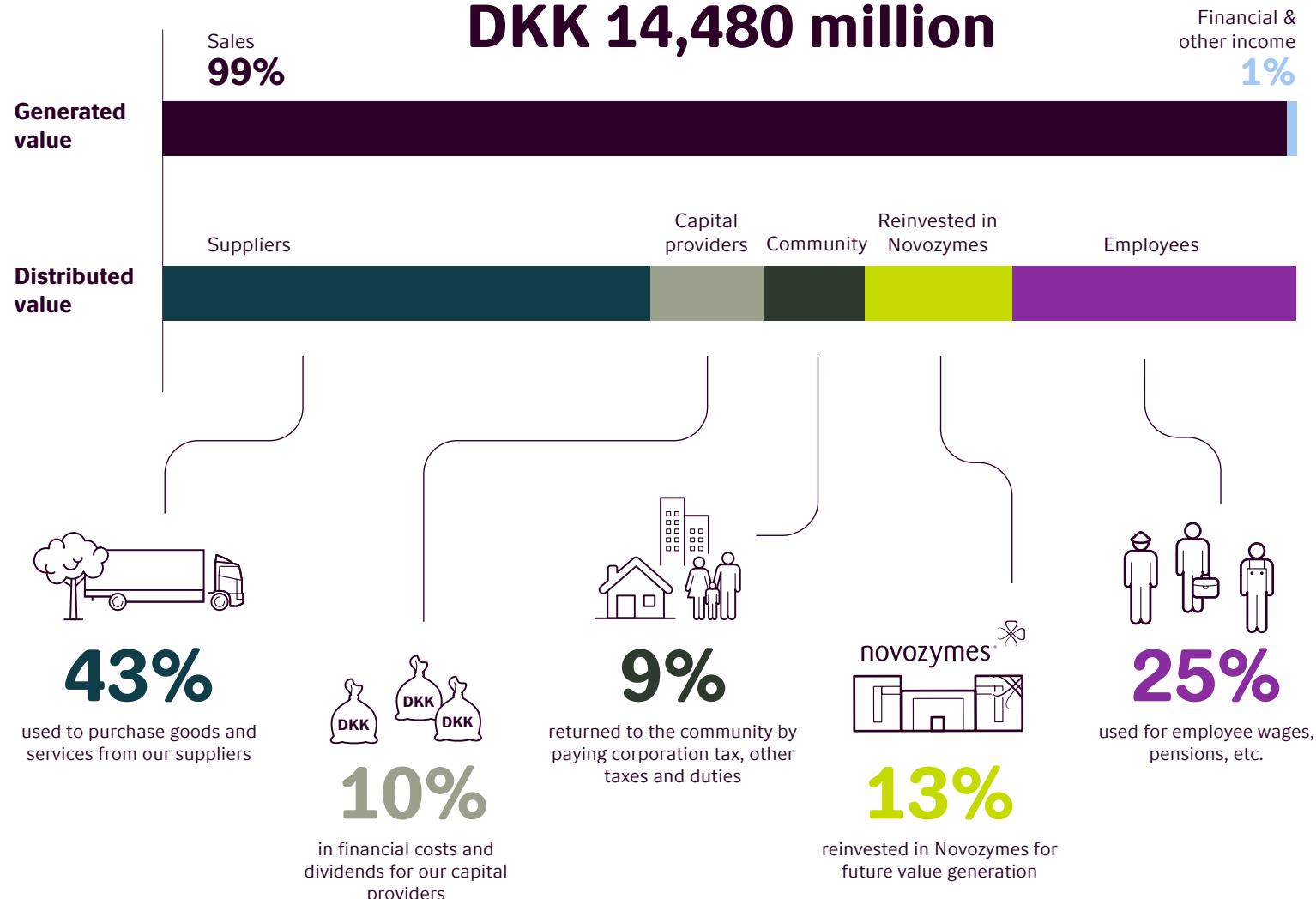
One of the ways in which Novozymes is contributing to this goal is through our wastewater solutions. Novozymes has produced and sold microbial solutions for wastewater treatment for a number of years. In 2018, with the launch of BioSec®, we took another step toward cleaner, greener wastewater for the world.



[Read more about BioSec® in the article "Every drop counts"](#)

Economic contribution

DKK 14,480 million



In 2018, Novozymes generated value of DKK 14,480 million. 87% of this amount was returned to society. The remaining 13% was reinvested in Novozymes to develop the company, and ensure competitiveness and future value generation for distribution among key stakeholders.

In addition to the 10% returned to capital providers, Novozymes bought back shares worth DKK 2 billion in 2018.

A positive tax contribution

Novozymes' overall tax strategy and transfer-pricing policy support a positive tax contribution to society and governments in the countries in which Novozymes operates. Novozymes continuously works to fulfill its tax obligations in the countries where it operates. We seek to obtain a competitive tax level in a fair and responsible way, and with full regard to national and international laws and regulations. Besides taxes, our economic contributions include duties, VAT, employee taxes, employee pension and benefit programs, procurement from local vendors and job creation.

In 2018, Novozymes incurred corporate income taxes and other taxes and duties that came to approximately DKK 1,250 million. In addition, Novozymes collected and withheld tax contributions on dividends and wages totaling approximately DKK 1,250 million. Novozymes' total tax contribution therefore amounted to approximately DKK 2,500 million, compared with approximately DKK 2,750 million in 2017.

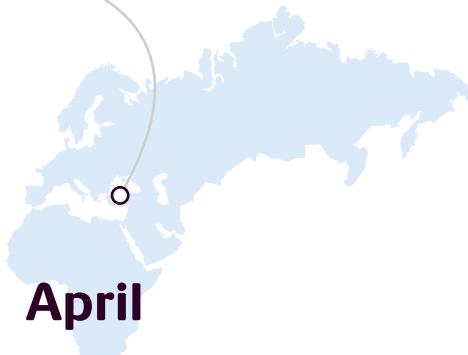
Key events 2018

2018



January

- Henkel recognizes Novozymes with its **Best Supply Performance Award for 2017**
- **Age of Biology** opens an art installation at Berlin Hauptbahnhof, Germany, using fungi provided by Novozymes



February

- Novozymes launches **Innova® Drive**, the first product from our yeast platform. Innova® Drive is aimed at ethanol plants with short fermentation times



May

- **Alterion® is approved for use in Europe.** The probiotic for poultry codeveloped with Adisseo is now available globally



April

- Novozymes opens the **Innovation & Technology Center in Istanbul, Turkey.** The center will cater to customers in the Middle East and Africa

June

- **Kalundborg Symbiosis receives the WIN WIN Gothenburg Sustainability Award for sustainable production.** The Symbiosis is a partnership between Novozymes and seven other manufacturers in Kalundborg, Denmark



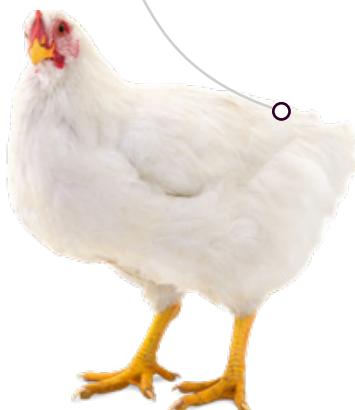
October

- **Novozymes launches Innova® Lift**, the second product from our yeast platform. Innova® Lift is aimed at ethanol plants with long fermentation times
- The Prime Minister of Denmark, **Lars Løkke Rasmussen**, visits **Novozymes' headquarters** in the lead-up to the Partnering for Green Growth and the Global Goals 2030 (P4G) environmental summit in Copenhagen
- For the third year in a row, Science Magazine ranks **Novozymes among the top 3 science employers** in the world



December

- Balancius™ receives **DSM's Innovation Award 2018**
- **Novozymes launches our first product for sludge dewatering, BioSec®**, aimed at municipal wastewater treatment facilities



September

- **DSM and Novozymes launch Balancius™**, a transformative innovation to improve nutritional uptake in poultry. Balancius™ enables farmers to use less feed to raise an animal



November

- **A new partnership is formed with Elanco Animal Health Inc.** to develop nutritional health products for beef and dairy cattle

Five-year summary

DKK million	2018	2017	2016	2015	2014
Income statement					
Revenue					
Revenue	14,390	14,531	14,142	14,002	12,459
Gross profit	8,255	8,413	8,126	8,129	7,149
EBITDA	5,158	5,114	4,960	5,011	4,400
Operating profit / EBIT	4,070	4,047	3,946	3,884	3,384
Financial items, net	(117)	(157)	(34)	(257)	(84)
Net profit	3,227	3,120	3,050	2,825	2,525
Balance sheet					
Total assets	19,697	18,373	18,659	17,791	18,426
Shareholders' equity	11,438	11,267	11,745	11,593	11,280
Invested capital	13,953	12,880	12,584	11,891	10,535
Net interest-bearing debt	2,535	1,642	990	437	(716)
Investments and cash flows					
Cash flow from operating activities	3,679	4,063	3,840	3,339	4,525
Purchases of property, plant and equipment	1,332	1,593	1,076	968	703
Net investments excluding acquisitions*	1,388	1,665	1,188	1,015	715
Free cash flow before net acquisitions and securities	2,291	2,398	2,652	2,324	4,229
Business acquisitions, divestments and purchase of financial assets	4	3	161	242	14
Free cash flow	2,287	2,395	2,491	2,082	4,215

* Excluding The BioAg Alliance impact in 2014.

	2018	2017	2016	2015	2014
Key ratios					
Revenue growth, DKK					
Revenue growth, DKK	%	(1)	3	1	12
Revenue growth, organic	%	4	4	2	4
R&D costs (% of revenue)	%	13.0	13.2	13.2	13.5
Gross margin	%	57.4	57.9	57.5	58.1
EBITDA margin	%	35.8	35.2	35.1	35.8
EBIT margin	%	28.3	27.9	27.9	27.7
Effective tax rate	%	18.0	19.5	21.4	22.0
Equity ratio	%	58.1	61.3	62.9	65.2
NIBD/EBITDA	x	0.5	0.3	0.2	0.1
Return on equity	%	28.4	27.1	26.1	24.7
ROIC including goodwill	%	24.2	25.6	25.1	25.9
WACC after tax	%	6.6	6.5	6.5	5.3
Earnings per share (EPS), diluted	DKK	11.03	10.49	10.06	9.12
Dividend per share (2018 proposed)	DKK	5.00	4.50	4.00	3.50
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 has been prepared as described in the Glossary.					

Environmental and social data

Total number of employees	No.	6,427	6,245	6,441	6,485	6,454
Rate of employee turnover	%	8.8	11.9	10.4	9.1	8.1
Frequency of accidents with absence per million working hours		2.4	1.6	2.2	2.5	1.7
Women in senior management	%	30	26	25	24	23
Estimated CO ₂ reductions from customers' application of Novozymes' products	Mill. tons	88	76	69	60	60