

Key financial performance



Market leader in industrial enzymes

With an estimated 48% of the global enzyme market in 2016, Novozymes reinforced its position as the world's leading producer of industrial enzymes.

Key figures

	2016 realized	2017 outlook
Sales growth, organic	2%	2-5%
Sales growth, DKK	1%	3-6%
EBIT growth	2%	3-6%
EBIT margin	27.9%	~28%
Net profit growth	8%	2-5%
Net investments excl. acquisitions, DKKm	1,188	1,700-1,900
Free cash flow before acquisitions, DKKm	2,652	2,000-2,200
ROIC (including goodwill)	25.1%	24-25%
Avg. USD/DKK	673	696

 Organic sales growth

2%

Sales grew by 2% organically and by 1% in DKK. Sales to Agriculture & Feed and Technical & Pharma were the most significant contributors to organic sales growth in 2016.

 EBIT margin

27.9%

EBIT margin was 27.9% in 2016, an improvement of 0.2 percentage points compared with 2015.

 Net profit growth

8%

Net profit was DKK 3,050 million, an increase of 8% from DKK 2,825 million in 2015, driven by higher EBIT and lower net financial costs.

 ROIC

25.1%

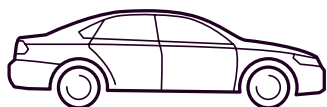
Return on invested capital (ROIC) including goodwill was 25.1%, 0.8 percentage points lower than for 2015. The decrease in ROIC was mainly a result of a higher capital base due to higher average net working capital, net investments and the acquisition of Organobalance GmbH.

 [Read more in Accounts & performance](#)

Key sustainability performance

CO₂ emission reduction

30,000,000



Read more in Note 7.1
Climate change

In 2016, our customers avoided an estimated 69 million tons of CO₂ emissions by applying Novozymes' products. The savings achieved are equivalent to taking approximately 30 million cars off the road.

Employee satisfaction



"Satisfaction and motivation" score in annual employee survey

2016 realized

76

2016 target

≥ 75



Water efficiency

6%

Water efficiency improved by 6% compared with the base year 2014. This improvement was less than our target of 12%. This was due to higher than expected water consumption as well as challenges in the system for water reuse in Denmark. The increased water consumption together with the slower-than-expected development in gross profit affected water efficiency performance. See Note 7.3.



Energy efficiency

10%

Energy efficiency improved by 10% compared with 2014. This improvement was less than our target of 18%. This was caused by operational challenges in Novozymes' fermentation facilities and higher than expected energy consumption. The increased energy consumption together with the slower-than-expected development in gross profit affected energy efficiency performance. See Note 7.2.



Frequency of occupational accidents

2.2

The frequency of **occupational accidents** decreased to 2.2 per million working hours in 2016 from 2.5 in 2015. However, this achievement was below our target of ≤ 1.7. Many accidents involved trips and falls, and some were due to mobile device distractions. Several new initiatives with focus on safety improvements were undertaken in 2016. See Note 8.2.

Key figures

	2016 realized	2016 target	2017 target
Estimated reduction in CO ₂ emissions through our customers' application of our products, in million tons	69	63	≥ 72
Water efficiency*	6%	12%	4%
Energy efficiency*	10%	18%	7%
CO ₂ intensity*	16%	20%	9%
Renewable energy	24%	24%	24%
Satisfaction and motivation**	76	≥ 75	
Opportunities for professional and personal development**	79	≥ 75	
Occupational accidents***	2.2	≤ 1.7	≤ 2.0
Employees promoted who are women	36%	≥ 40%	
Employee absence	2.0%	≤ 2.0%	≤ 2.0%
RobecoSAM class rating****	Silver	Medal	Medal

* Efficiency/intensity is measured by dividing net consumption by gross profit. The improvement is calculated as the relative improvement in efficiency/intensity compared with the base year 2014.

** Score in annual employee survey.

*** Per million working hours.

**** The distribution of medals will be announced in RobecoSAM's Sustainability Yearbook on Jan. 19, 2017. We expect silver.

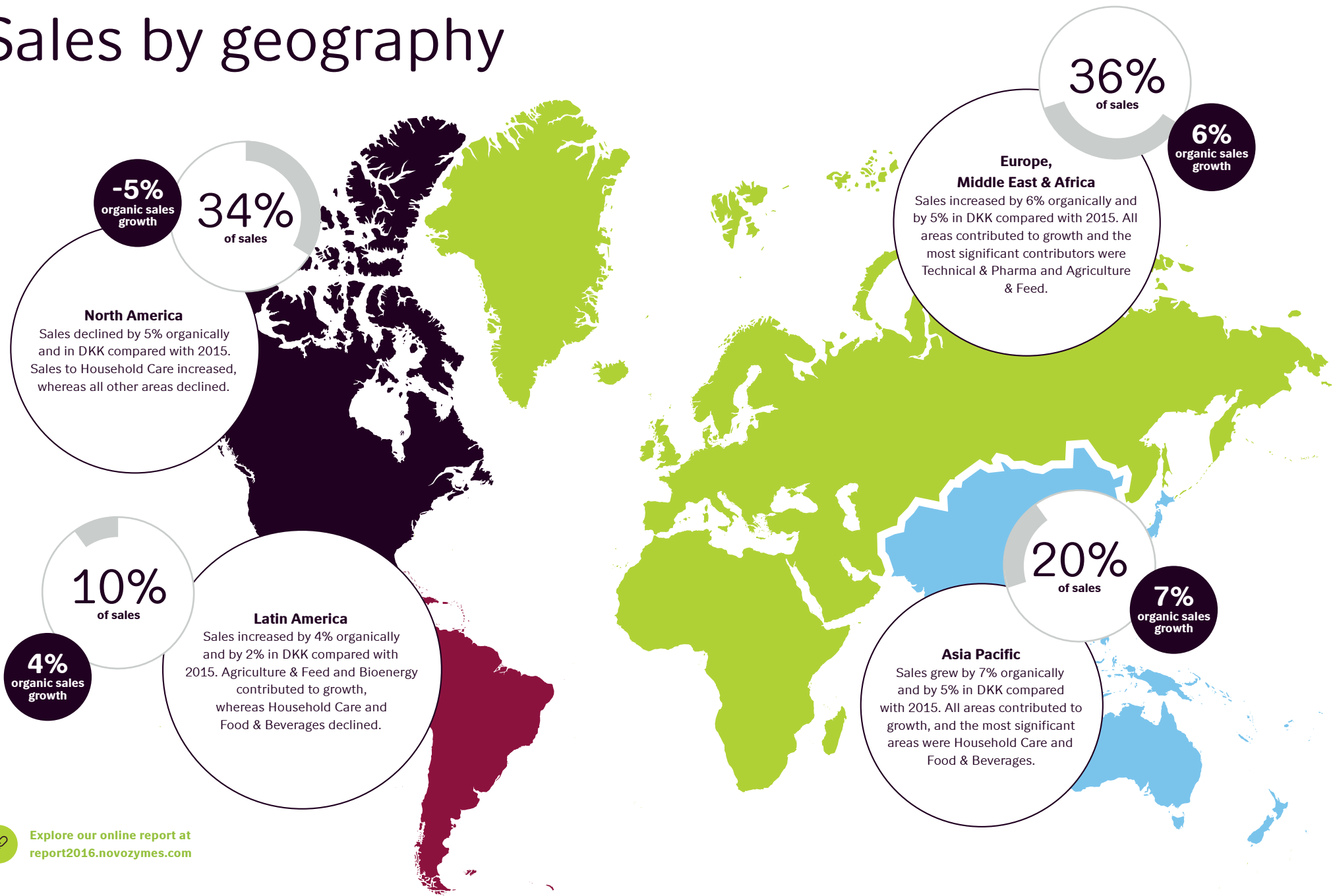


RobecoSAM class rating Silver



Read more in
Accounts & performance

Sales by geography



 Explore our online report at report2016.novozymes.com

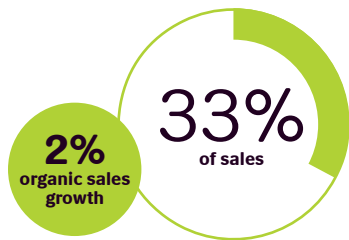
Sales by industry



Household Care

Sales to the Household Care industry increased by 2% organically and in DKK compared with 2015. The division has made good progress on the key strategic initiatives throughout 2016, with continued progress expected in 2017. Market interest in new enzyme technology is very strong.

In 2016, sales in Asia grew solidly, driven by penetration of performance-boosting enzymes in liquid formulas, particularly in the Chinese market. Sales in North America grew moderately due to higher demand for premium detergent products. Sales growth in Europe was slightly positive, following the underlying market growth. Sales growth in Latin America was slightly negative.



Food & Beverages

Sales to the Food & Beverages industries increased by 2% organically and increased by 1% in DKK compared with 2015.

In 2016, sales to the starch and beverage industries were the main contributors to sales growth. Enzyme sales to the starch industry benefited from strong starch syrup markets and recently launched innovation. Sales to the baking industry were flat. Sales for production of healthy foods declined due to lower enzyme sales for infant formula, but growth in other areas of the health category partly offset the negative development.



Bioenergy

Sales to the Bioenergy industry decreased by 3% organically and by 4% in DKK compared with 2015.

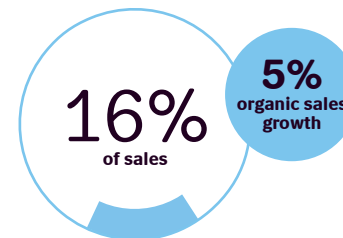
Throughout 2016, ethanol producers have focused on low-cost solutions, resulting in a dynamic market place with negative product mix and price changes. US ethanol production in 2016 is estimated to be up by 3% compared with 2015, and global ethanol production is estimated to be up by 2%.



Agriculture & Feed

Sales to the Agriculture & Feed Industries increased by 5% organically and by 4% in DKK compared with 2015. Sales growth was driven by solid sales growth in Feed and moderate sales growth in BioAg.

Sales development in BioAg was moderately positive, primarily driven by the ramp-up in Q4 in preparation for the 2017 North American growing season. Agricultural markets in the US and Latin America have felt strong headwinds in 2016, which also affected farmers' willingness to invest in biological solutions. In 2016, Novozymes recognized DKK 194 million of deferred income as revenue, compared with DKK 224 million in 2015. Sales to the animal feed market grew solidly across main geographies. The growth was driven by both carbohydrate- and protein-enhancing solutions. The launch of the probiotic Alterion® in 2016 has been successful, and trials have progressed well throughout the year.



Technical & Pharma

Sales to the Technical & Pharma industries increased by 13% organically and by 8% in DKK compared with 2015. The strong growth was mainly driven by sales of enzymes for pharmaceutical production, sales of hyaluronic acid and contributions from the royalty agreement with GSK.



Key events in 2016



Adisseo and Novozymes launch a probiotic based on beneficial bacteria to improve poultry health



Alaska Airlines becomes the first carrier to operate flights using a blend of 20% renewable fuel and traditional jet fuel



Novozymes announces its H1 results with adjusted sales expectations for the full year due to the Q2 performance and the uncertainty facing many markets



The UN Global Compact recognizes Novozymes China as a Pioneer Company for achieving the UN Sustainable Development Goals (SDGs)

APRIL

Forbes magazine names CEO Peder Holk Nielsen as one of its 30 global game changers

JUNE

20 organizations, including Audi, Pannonia, Yale University and Novozymes, team up to advance sustainable fuels through the below50 initiative



AUGUST

DONG Energy and Novozymes announce their intention to turn household trash into green power at DONG Energy's future REnescience plant in Manchester, UK

Novozymes is ranked #9 on Fortune Magazine's list of companies changing the world



JANUARY

Henkel recognizes Novozymes with its Best Supply Performance and Sustainability Award Laundry & Home Care for 2015



MEMBER OF

Dow Jones Sustainability Indices

In Collaboration with RobecoSAM

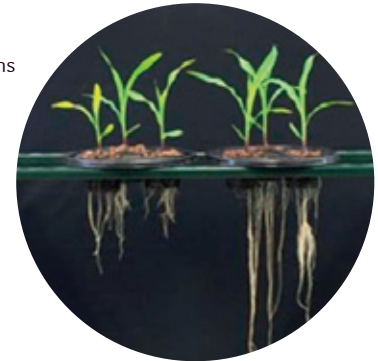
The Dow Jones Sustainability Index ranks Novozymes among the most sustainable companies in the world, with an overall score of 90 out of 100



Novozymes breaks ground on the new innovation campus in Lyngby, Denmark. The new center will be a global hub for biotech research and business development

DECEMBER

The BioAg Alliance launches Acceleron® B-300 SAT, a new microbial solution that boosts corn yields



Novozymes announces plans to build a new production and supply chain facility near Mumbai, India



NOVEMBER

P&G names Novozymes its Business Partner of the Year and recognizes our consistent high-level performance with the Excellence Award



**Science 2016
TOP EMPLOYER**

Science Magazine ranks Novozymes among the top 10 science employers in the world, for the second year running

SEPTEMBER

Novozymes acquires Organobalance GmbH, a company specializing in microbial screening and assay development



OCTOBER

The CDP A List recognizes Novozymes as a world leader on corporate climate action



CLIMATE

Economic contribution

In 2016, Novozymes' generated value amounted to DKK 14,291 million. 86% of this amount was returned to society. The remaining 14% was reinvested in Novozymes to develop the company, and ensure competitiveness and future value generation for distribution among key stakeholders.

In addition to the 8% returned to capital providers, Novozymes bought back shares worth DKK 2 billion in 2016.

Generated value

Sales **99%** Financial and other income* **1%**

14,291 DKKm

Distributed value



42%

used to purchase goods and services from our **suppliers**



10%

returned to the **community** by paying corporation tax, other taxes and duties



26%

used for **employee** wages, pensions, etc.



8%

in financial costs and dividends for our **capital providers**



14%

reinvested in **Novozymes** for future value generation

* Grants, license fees, milestones, gain/loss on sale of licenses, patents, etc.

Five-year summary

DKK million	2016	2015	2014	2013	2012
Income statement					
Revenue	14,142	14,002	12,459	11,746	11,234
Gross profit	8,126	8,129	7,149	6,716	6,423
EBITDA	4,960	5,011	4,400	3,639	3,448
Operating profit / EBIT	3,946	3,884	3,384	2,901	2,745
Financial items, net	(34)	(257)	(84)	(134)	(158)
Net profit	3,050	2,825	2,525	2,201	2,016
Balance sheet					
Total assets	18,659	17,791	18,426	16,506	15,113
Shareholders' equity	11,745	11,593	11,280	11,066	9,568
Invested capital	12,584	11,891	10,535	11,871	10,998
Net interest-bearing debt	990	437	(716)	805	1,430
Investments and cash flows					
Cash flow from operating activities	3,840	3,339	4,525	2,599	2,758
Purchases of property, plant and equipment	1,076	968	703	762	1,128
Net investments excluding acquisitions and the BioAg Alliance impact	1,188	1,015	715	783	1,177
Free cash flow before net acquisitions and securities	2,652	2,324	4,229	1,816	1,581
Business acquisitions and purchase of financial assets	161	242	14	640	732
Free cash flow	2,491	2,082	4,215	1,176	849

		2016	2015	2014	2013	2012
Key ratios						
Revenue growth, DKK	%	1	12	6	5	7
Revenue growth, organic	%	2	4	7	7	4
R&D costs (% of revenue)	%	13.2	13.5	14.8	13.0	13.6
Gross margin	%	57.5	58.1	57.4	57.2	57.2
EBITDA margin	%	35.1	35.8	35.3	31.0	30.7
EBIT margin	%	27.9	27.7	27.2	24.7	24.4
Effective tax rate	%	21.4	22.0	23.0	20.2	22.0
Equity ratio	%	62.9	65.2	61.2	67.0	63.3
NIBD/EBITDA		0.2	0.1	(0.2)	0.2	0.4
Return on equity	%	26.1	24.7	22.6	21.3	21.9
ROIC including goodwill	%	25.1	25.9	23.1	20.0	19.9
WACC after tax	%	6.5	5.3	3.7	4.7	4.7
Earnings per share (EPS), diluted	DKK	10.06	9.12	8.02	6.93	6.33
Dividend per share (2016 proposed)	DKK	4.00	3.50	3.00	2.50	2.20

Key ratios have been prepared in accordance with The Danish Finance Society's "Recommendations & Financial Ratios 2015 Nordic Edition" as well as certain key figures for the Novozymes Group as described in the Glossary.

Environmental and social data

Total number of employees	No.	6,441	6,485	6,454	6,236	6,041
Rate of employee turnover	%	10.4	9.1	8.1	7.5	8.1
Frequency of accidents with absence per million working hours		2.2	2.5	1.7	2.4	3.0
Employee satisfaction	Score	76	77	77	77	78
Development opportunities	Score	79	80	75	74	75
Employees promoted who are women	%	36	41	34	26	37
Estimated CO ₂ reductions from customers' application of Novozymes' products *		69	60	60	52	48

* Data for 2012-2013 have been calculated based on life cycle assessment data from 2008.