

Outlook for 2019

Sales outlook

Novozymes expects 3-6% organic sales growth for 2019. Growth is supported by strong innovation and increased market penetration, especially in the emerging markets. The 3-6% range also reflects geopolitical uncertainty such as the one in the Middle East (affecting Household Care, Food & Beverages and Technical & Pharma), the future setup of our BioAg business as well as volatile agricultural markets.

Using current spot rates as full-year estimates for the major currencies, and including lower recognition of deferred income (BioAg), Novozymes expects to see a positive impact of approximately 1 percentage point for growth in DKK. Roughly DKK 113 million of deferred income will be recognized in 2019, compared with DKK 169 million in 2018.

The first quarter of 2019 is expected to see a modest decline in organic sales y/y, mainly due to annualization of the Middle Eastern impact from the second half of 2018, a challenging Feed comparison and the enzyme price reductions in US baking coming to an end. Organic sales growth in the second half of the year is expected to be much stronger thanks to an easier Middle East comparison, the freshness platform in Household Care entering Europe, BioAg seasonality, an easing y/y price effect in US baking and Bioenergy volume growth picking up in the US market.



Household Care 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.



Food & Beverages 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 overall in Food & Beverages, including annualization of the Middle Eastern impact.



Bioenergy organic sales growth is expected to be driven mainly by increased penetration from innovation as well as volume growth outside the US market. We expect US ethanol production in 2019 to be slightly lower than in 2018, with ethanol inventory levels remaining high into 2019. As such, we expect first-quarter US ethanol production to decline, before improving for the rest of the year. We expect high-single-digit growth in Bioenergy for the full year.



Agriculture & Feed 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 for Agriculture & Feed for the year.

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



Technical & Pharma 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.

Profit outlook

For 2019, we expect an EBIT margin of 28-29%, including a minor positive impact from currencies. As currencies are experiencing high volatility, in particular the US dollar, a weakening relative to what has been assumed in the guidance for the full year could impact the EBIT margin negatively. The DKK ~60 million lower deferred income expected in 2019 relative to 2018 impacts EBIT, and the EBIT margin, negatively. Sales growth and productivity improvements are expected to be supportive of margins, mitigating the effects of higher input costs.

Given the current visibility and interpretation of various country-specific tax rules and levels, Novozymes expects an effective tax rate of 18-20% for 2019.

Financial outlook

	2018 realized	2019 outlook ¹
Sales growth, organic	4%	3-6%
EBIT margin	28.3%	28-29%
Net profit growth	3%	0-5%
Net investments excl. acquisitions, DKKbn	1.4	1.0-1.3
Free cash flow before acquisitions, DKKbn	2.3	2.2-2.6
ROIC (including goodwill)	24.2%	~23% ²
Avg. USD/DKK	631	657

1. Assumes that the exchange rates for the company's key currencies remain at the rates on January 23 for the rest of 2019.

2. The implementation of IFRS 16 Leases has a negative impact on ROIC of approximately 1 percentage point.

Net profit growth is expected to be 0-5%. The USD currency exposure has been hedged through forward contracts at an average exchange rate of 6.21 USD/DKK for 2019.

Net investments are expected to be DKK 1.0-1.3 billion (2018: DKK 1.4 billion). The investment level for 2019 reflects general maintenance CAPEX, expansion CAPEX as well as the finalization of the innovation campus in Lyngby, Denmark.

Free cash flow before acquisitions is expected to be in the range of DKK 2.2-2.6 billion (2018: DKK 2,291 million). The reclassification of lease payments (IFRS 16) is expected to impact free cash flow positively by around DKK 0.1 billion.

Return on invested capital (ROIC) including goodwill is expected at around 23% (2018: 24.2%). The average calculation of invested capital now includes a higher end balance following the major investment programs that we announced early in 2017. The implementation of IFRS 16 Leases has a negative impact on ROIC of approximately 1 percentage point.

Currency exposure

From a currency perspective, we expect 2019 EBIT to be most exposed to fluctuations in the USD.

Other things being equal, a 5% movement in USD/DKK is expected to have an annual positive/negative impact on EBIT of DKK 130-160 million, and a 5% movement in EUR/DKK is expected to have an annual positive/negative impact on EBIT of DKK ~200 million.

Since October 2018, we have hedged our expected USD cash flow using 12-month rolling contracts. 2018 was fully hedged at an average of USD/DKK 6.18. 2019 is fully hedged at an average of USD/DKK 6.21.

The outlook is based on exchange rates for the company's key currencies remaining at the closing rates on January 23 for the full year.

Sustainability outlook

Novozymes remains committed to continuously improving the sustainability performance of our own operations and supply chain. Improving sustainability performance is a long-term undertaking, and we will continue to pursue and prioritize opportunities to make our operations more cost-effective, environmentally friendly and socially responsible.

For 2019, we will continue with annual targets to keep our resource consumption and CO₂ emissions lower than our organic sales growth, while working to define better long-term targets in these areas. We will work to improve the share of renewable energy in our energy mix to support us on our journey of decoupling our business growth from the impact it has on the environment. We will also sharpen focus on our safety culture and continue our global initiatives to improve our safety behavior to reduce the number of accidents in 2019.

We are seeing an increasing level of third-party assessment and engagement with our investors on our sustainability performance. In an effort to streamline our reporting on sustainability to various channels, we decided to discontinue our participation in the RobecoSAM

corporate sustainability assessment. However, our commitment to improving our sustainability performance and disclosure remains intact.

Key sustainability targets

Environment	2019 target	2020 target
Estimated reduction in CO ₂ emissions through our customers' application of our products, million tons	≥ 94	100
Growth in absolute water usage*	< organic sales growth	
Growth in absolute energy usage*	< organic sales growth	
Growth in absolute CO ₂ emissions*	≤ organic sales growth	
Renewable energy*	28%	30%
People		
Occupational accidents per million working hours*	≤ 1.5	≤ 1.0
Employee absence*	≤ 2.0%	≤ 2.0%
Women in senior management*	≥ 29%	≥ 30%
Satisfaction and motivation*	≥ 79	≥ 79
Enable employee development*	≥ 75	≥ 75
Talent utilization*	≥ 38%	
Stakeholders		
Customer satisfaction	≥ 50	

* Included as Management remuneration target.