HALDOR TOPSØE

Making **optimal** performance possible

Annual Report 2017

Topsoe is a world leader in catalysis, committed to helping our customers achieve optimal performance – getting the most out of their processes and products, using the least possible energy and resources.

We supply high-performance catalysts, proprietary technologies, process design, engineering, and services for use in the chemical and oil & gas industries, and we are at the forefront of developing sustainable technologies.

Our solutions address pressing global challenges, such as improving energy efficiency, enhancing food production for the world's growing population, and protecting our environment

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Letter from the Chairman

Focus on long-term **profitability**

For Haldor Topsoe, 2017 was a year of consolidation. During the year, we witnessed the first signs of a turn-around in the global energy sector. However, the positive development was not enough to make up for the massive drop in oil prices in previous years, which had a significant impact on many of the company's markets. Particularly in Russia and South America, we have seen a stagnant technology market with no or very few new projects. Topsoe has adapted by focusing on revamps and optimization of existing plants. Catalysts are necessary to keep existing plants running, and we still see satisfactory catalyst sales in these regions.

In 2017, the Board decided to divest Topsoe's emissions control business. The related revaluation had a significant negative impact on the financial results, which consequently did not meet our ambitions.

For the continuing business, it is a concern that no growth in revenue has been achieved in 2017, although net profit remains acceptable.

Consequently, Topsoe has strong focus on consolidating the business. The divestment of the emissions control business in 2017 should be seen as yet another big step towards securing the value of Topsoe's product and technology platform, as it gives some financial headroom to develop the catalyst, technology, and service offerings to the refining and chemical industries, while also developing new sustainable solutions.

However, Topsoe's leading position in several of its core markets combined with increasing market maturity makes organic growth in these markets a challenge. To secure long-term profitability, Topsoe must continue to develop and expand the product portfolio based on its core competencies.

The transition from fossil fuels to sustainable energy sources is a long-term global trend. However, we expect this transition to be relatively slow. While the share of fossil-based energy will undoubtedly be reduced over the coming years, the actual consumption of fossil fuels is expected to increase slowly due to the world's increasing need for energy.

This leaves Topsoe in a promising position. We will further strengthen our market position of our primarily fossil-based products, while also investing in the development of fossil-free alternatives.

The Board will continue to work closely with the Executive Committee to consolidate the company and implement the strategy in order to build the foundation for long-term profitability.

During the Board's trip to Topsoe's office in Moscow at the end of 2017, we got a very convincing impression of the customers' appreciation of Topsoe's unique qualities as a business partner and supplier. We also met many of our employees in Russia, who genuinely impressed us with their dedication and high level of professional skills. Just like the Board has previously experienced at Topsoe's other global offices.

On behalf of the Board of Directors, I would like to thank the Executive Committee and all of Topsoe's employees for a dedicated and persistent contribution in a challenging year. Topsoe has become a more focused and robust company, and the Board is confident that Topsoe will successfully continue its consolidation and deliver long-term profitability.

Jeppe Christiansen
Chairman of the Board of Directors

"Topsoe has strong focus on consolidating the business."

Letter from the CEO

Consolidating the business

Continuing operations DKK million	2017	2016	Change 2016-2017	Change 2016-2017 adj. for 2016 one-time effect
Revenue	5,011	5,150	-3%	0%
EBITDA	852	1,071	-20%	-10%
EBIT	595	811	-27%	-14%
Profit from continuing operations	**403**	**545**	**-26%**	**-11%**
Loss from discontinuing operations	-422	-53		
Net profit	-19	492		
Lost time accidents frequency (per million work hours)	6.3	3.4		
R&D spend (of revenue)	9.4%	9.6%		

We have focused on consolidating our company, improving profitability, and strengthening our product and service portfolio in 2017. While we have seen satisfactory progress in these long-term efforts, the associated costs have made their mark on the 2017 results, which consequently do not live up to our overall growth ambitions.

The mature markets for our core technologies grow at rates below average GDP. Accordingly, we have intensified our efforts to develop innovative products that, combined with new market penetration, can secure a performance above the market benchmark in the coming years. Another major step was the divestment of our emissions control business that has sharpened our focus on our continuing and very profitable core business.

Topsoe's core business is delivering catalysts and related services and technology to the chemical and refining industries. In 2017, catalyst sales grew by 4%, while technology sales declined by 17%. The decline in technology sales is exacerbated by a significant one-time effect from restarted contracts that lifted revenue and EBIT by DKK 122 million in 2016. Apart from this effect, technology sales in 2017 reflect the cyclic nature of the market and the fact that many of our customers currently face challenges in financing new technology projects. However, we see considerable interest in several of our technologies, notably within sulfur management and large-scale syngas reforming used in the production of a wide range of chemicals, including ammonia and methanol.

As a science-based company, we sustain our leading position in several of our core markets by maintaining a high level of research and development of exceptional quality. Again in 2017, we invested almost 10% of revenue in R&D.

During the year, Topsoe expanded its R&D presence in the Chinese growth market by entering into R&D partnerships with Yanchang Petroleum Group and Wison Engineering.
In November, we announced a partnership with Braskem, a leader in sustainable specialty chemicals, centered on commercializing Topsoe's groundbreaking MOSAIK™ solution that forms the basis for a growing portfolio of bio-based chemicals. A number of innovative products were introduced during the year, including the sulfuric acid catalyst LEAP5™, the SynCOR Ammonia™ technology, and HiPerFuel™ that upgrades landfill gas to clean natural gas.

In 2017, we began a digitalization venture with initial focus on digitalization of services, and we are already testing new applications in close collaboration with customers. Digitalization across our processes and business activities will be a strategic focus area in the years to come.

The organization has also been adjusted to support the consolidation and focus, most notably by gathering all development activities in the R&D unit and establishing a new department, Exploratory R&D, focusing on new strategic projects.

Despite our committed safety focus, the number of lost time accidents has unfortunately increased in 2017. While there have been fewer severe accidents, less severe accidents such as slips, trips, and falls have occurred more often. As a consequence, we have taken several initiatives to further improve our health & safety culture through training and campaigns.

In June 2017, we announced the divestment of our emissions control business. As the market has evolved, it was no longer realistic for Topsoe to make the emissions control business profitable. It was necessary to find a new owner better positioned in a market characterized by price competition and dominated by large players. We succeeded in making an agreement with an optimal buyer who saw the opportunity to complete their already extensive emissions control catalysts portfolio by acquiring the excellent technology Topsoe has developed and taking over production facilities as well as a large number of highly qualified employees.

The divestment represented approximately 12% of Topsoe's business measured in revenue. 286 employees, two production plants in China and Brazil as well as two production lines in Denmark and the US were transferred to the buyer when the deal was closed on November 30, 2017.

The sales proceeds impact our cash flow positively and reduces net debt. This positions Topsoe to expand its continuing, very profitable core business and sharpen its focus on developing groundbreaking sustainable solutions.

I am confident that the ongoing consolidation and increased focus on profitability will position the company to achieve our long-term ambitions of growth above the market average. Our owners, the Board of Directors, and the Executive Committee are fully aligned in our commitment to this task, and we will continue the process in 2018 and the years to come. We will also explore acquisition opportunities that can expand our product and services portfolio or market access within our core business.

I want to thank the Board of Directors for their contribution and collaboration in 2017. Topsoe's employees have worked very hard in the past year, and once again, they have been instrumental in the advancement of our common workplace. Thank you all for that. You make a decisive difference for our customers and the communities they operate in.

Bjerne S. Clausen
President & Chief
Executive Officer

"Topsoe is positioned to expand its existing core business and sharpen its focus on developing ground-breaking sustainable solutions."

Topsoe in **brief**

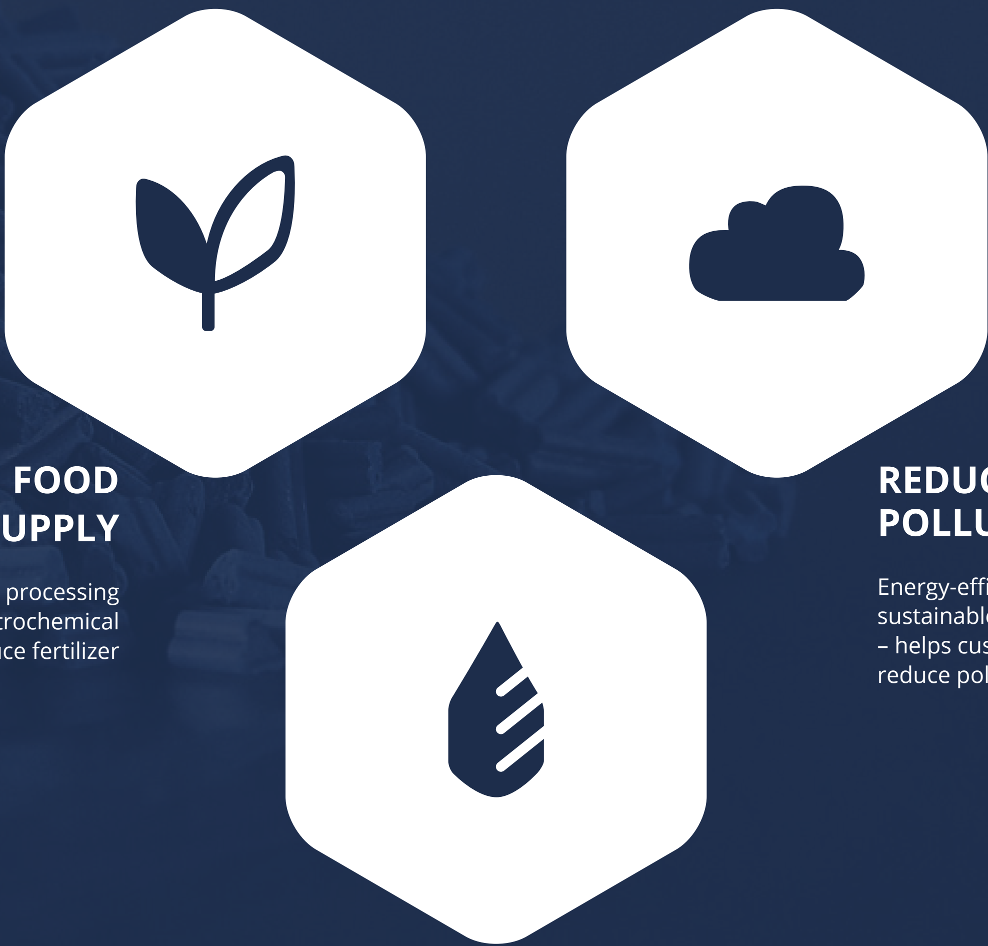
What is catalysis?

- A catalytic process converts one chemical component into another. For instance, hydrogen and nitrogen can be catalyzed into ammonia.
- Using a catalyst to produce a chemical process speeds up the reaction and consumes much less energy. Production yield increases, and resources are saved.
- 60% of all industrial products are made using catalysts.

TK-611 HyBRIM™ is one of Topsoe's many high-performance catalysts for refineries. One of its applications is to produce ultra-low sulfur diesel that reduces sulfur emissions.

What we **do**

Driven by our passion for science, we enable our customers to get the most out of their processes and products, using the least possible energy and resources. Our solutions touch upon some of the most pressing challenges of our time within food supplies, energy, and pollution control.



SECURE FOOD SUPPLY

Chemical processing – helps the petrochemical industry produce fertilizer

REDUCING POLLUTION

Energy-efficient and sustainable solutions – helps customers reduce pollution

CLEANER FUELS

Hydroprocessing – helps refineries produce high-grade products that comply with environmental regulations

Making **optimal** performance possible

Our customers are under constant pressure to get more from less and even the smallest performance improvements are important. In Topsoe, we respond to customer challenges, using our exceptional insight into catalysis and surface science to deliver unique integrated solutions that secure optimal performance for our customers.

CUSTOMER CHALLENGES

Great solutions begin here

The starting point of a great solution is a deep understanding of the problem. That's why our work begins with our customers' challenges.

CATALYSIS & SURFACE SCIENCE

Innovation at your service

For more than 75 years, we have showed the way for the development of catalysis as an industrial core process. This insight still turns challenges into solutions.

OPERATIONS & MAINTENANCE

PROJECT DEVELOPMENT

BUSINESS & TECHNOLOGY SERVICES

PROCESS DESIGN, ENGINEERING & LICENSING

CATALYSTS

TAILORED HARDWARE

Integrated solutions

Topsoe's world-leading services can stand alone or be integrated in uniquely reliable solutions that cover customers' needs from the early beginning of a project to daily operations and maintenance.

OPTIMAL PERFORMANCE

We give customers what they really need

Optimal performance – in terms of economy, quality, and environmental impact.

Topsoe around **the globe**

Customers all over the world are serviced by our regional offices. Topsoe's global organization also encompasses production plants and engineering activities.

HQ Headquarters

Production plants

Regional offices

Engineering

North America

Customers in the refining, chemical and petrochemical industries in North America show great interest in Topsoe's catalysts and technologies, making this our largest global market. The shale gas boom has spurred significant interest in solutions that convert shale gas into high-value products. Our portfolio of hydroprocessing technologies such as hydrocracking and renewable fuels technologies are also in high demand.

We employ more than 220 people at our production plant and main office in Houston, US, and at our offices in Los Angeles, US, and Edmonton, Canada.

Latin America

In 2017, customers in Chile and Argentina chose Topsoe's hydrotreating, hydrocracking and VK catalysts giving us a high market share in this region. Topsoe was awarded the license and basic engineering projects of a grassroots hydrotreating project and a hydrogen plant in Nicaragua.

Topsoe's engagement in Latin America continues to grow. We opened an office in Mexico, and customers show great interest in our catalyst solutions, our hydrotreater, and our coker naphtha hydrotreating units.

We employ 30 people at our offices in Buenos Aires, Argentina, Rio de Janeiro, Brazil, and Mexico City.

Denmark

HQ

Denmark is home to Topsoe's headquarters, where over 1,100 employees work in research & development, engineering, global sales, and support functions. The research conducted here has resulted in e.g. the LEAP**5**™ catalyst and the MOSAIK™ bio-based chemicals solution that were announced in 2017.

Topsoe's largest production facility is located in Frederikssund, Denmark. Here, more than 570 highly skilled operators and other employees manufacture a large variety of products under very high quality demands. The plant ships products to customers in all parts of the world.

Russia, nearby countries

Russia and neighboring countries need solutions to capitalize on their rich oil and gas resources in an efficient way. This has led to a strong position for Topsoe's offerings, especially in the refinery and fertilizer industries. Our catalyst and technology business has grown fast in recent years and represents a significant share of Topsoe's overall revenue.

Our Moscow office is the base for 70 employees who service Russia, Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Turkmenistan, Ukraine, and Uzbekistan. Topsoe has enjoyed close collaboration with the Russian industrial and scientific community for decades.

Middle East

Customers in the petrochemical and refining industries of the region focus on downstream integration. This requires Topsoe catalysts, technologies, and services that support core processes within methanol, ammonia, hydroprocessing, hydrogen production, and gas-to-liquids. As fuel specifications and environmental regulations become more stringent, our hydroprocessing and environmental solutions meet increasing demand. Topsoe also offers technology upgrades to improve energy efficiency and production yield.

In 2018, we will open an office in Khobar, Saudi Arabia, to strengthen our presence in this vital market.

20 people are employed at our offices in Bahrain and Iran.

India

Indian ammonia plants use Topsoe catalysts to make the majority of all ammonia produced in the country. Their preference for Topsoe technology has made us the largest supplier of hardware for the ammonia industry as well. In 2016-17, our Indian engineering unit provided the complete engineering design package for the new Ramagundam ammonia plant – a flagship “revival project".

We are also active in the Indian refinery market, especially within hydroprocessing, and Topsoe supports India's drive for cleaner fuels according to new regulations.

Our New Delhi regional office is the workplace for more than 200 people and also house our engineering unit, IT competence center, and finance service center.

Southeast Asia

Southeast Asia has several emerging markets and is rich in natural resources that can be monetized using Topsoe technologies. More stringent environmental regulations will increase demand for Topsoe’s solutions, and we experience increasing demand for technology and catalysts for refinery and environmental solutions to manage emissions and produce cleaner fuels. Within ammonia and methanol there is an interest in revamping existing units for energy optimization and diversification.

Topsoe’s office in Kuala Lumpur, Malaysia, supports our customers in the ASEAN countries as well as Bangladesh, Australia and New Zealand. 16 people are employed here.

China

The growth of independent refineries in China is very much driven by the country's increasing energy consumption and demand for oil products and downstream chemicals. This brings new business opportunities for Topsoe refinery solutions such as hydrotreating catalyst, hydrocracking technology, and catalysts. Topsoe's WSA and VK products still maintain a high market share due to higher emission standards and stringent environmental requirements. The adjustment of the energy structure opens the market for Topsoe’s chemical and sustainable technologies and products such as methanol and tar hydrotreating.

Topsoe has 75 employees in China at our regional office in Beijing and the R&D center in Dalian.

Accomplishments and **results**

Five-year summary

Below is a summary of the Group's financial highlights for the five most recent years.

Income statement [1]

DKK million	**2017**	**2016**	**2015** [3]	**2014** [3]	**2013** [3]
Revenue	5,011	5,150	5,785	5,685	5,348
Gross profit	2,391	2,608	2,483	2,542	2,408
EBITDA	852	1,071	795	929	876
Depreciation and amortization	-257	-260	-293	-366	-175
EBIT	595	811	502	563	701
Net financial expenses etc.	-66	-24	-40	14	-21
Profit from continuing operations	403	545	322	440	553
Loss from discontinuing operations	-422	-53	-	-	-
Net profit	-19	492	322	440	553

Balance sheet

DKK million	**2017**	**2016**	**2015** [3]	**2014** [3]	**2013** [3]
Balance sheet total	6,189	7,161	7,194	6,455	6,132
Equity	1,664	2,238	2,003	1,831	1,644
Net working capital	668	610	451	540	462
Net interest bearing debt	855	1,191	1,152	1,016	994

Cash flow

DKK million	**2017**	**2016**	**2015** [3]	**2014** [3]	**2013** [3]
Cash flows from operating activities	137	748	750	754	483
- Of which continuing operations	421	785	-	-	-
Cash flows from investing activities	690	-386	-638	-585	-721
- Of which investments in property, plant and equipment	-211	-393	-589	-600	-664
Cash flows from financing activities	-586	-530	-99	-222	163
Change in cash and cash equivalents for the year	201	-162	32	-14	-75

Employees

Number	**2017**	**2016**	**2015** [3]	**2014** [3]	**2013** [3]
Average number of employees	2,527	2,543	2,688	2,694	2,430

Ratios

%	**2017**	**2016**	**2015** [3]	**2014** [3]	**2013** [3]
Gross margin [2]	47.7	50.6	42.9	44.7	45.0
EBITDA margin [2]	17.0	20.8	13.7	16.3	16.4
EBIT margin [2]	11.9	15.7	8.7	9.9	13.1
Return on invested capital (ROIC) [2]	22.4	33.8	16.0	20.1	31.0
Equity ratio	26.9	31.3	27.8	28.4	26.8
Return on equity	-1.0	23.2	16.8	25.3	36.1
Return on equity, continuing operations	18.2	25.4	-	-	-

The ratios have been prepared in accordance with the recommendations and guidelines issued by the Danish Society of Financial Analysts.

[1] Income statements for 2016 and 2017 consist of continuing operations with discontinuing operations in a separate line.

[2] Ratios for 2016 and 2017 apply to continuing operations.

[3] Figures for 2013-2015 have not been restated with the sale of the emissions control business in 2017. Figures for 2013-2015 are therefore not comparable to figures for 2016-2017, where the divested business is presented as discontinuing operations.

Profit from continuing operations amounted to DKK 403 million in 2017 (2016: DKK 545 million). The decline in profit was mainly due to reduced technology revenue. However, it should be noted that the 2016 results were positively affected by the significant one-time effect of restarted Iranian contracts that impacted revenue and EBIT by DKK 122 million.

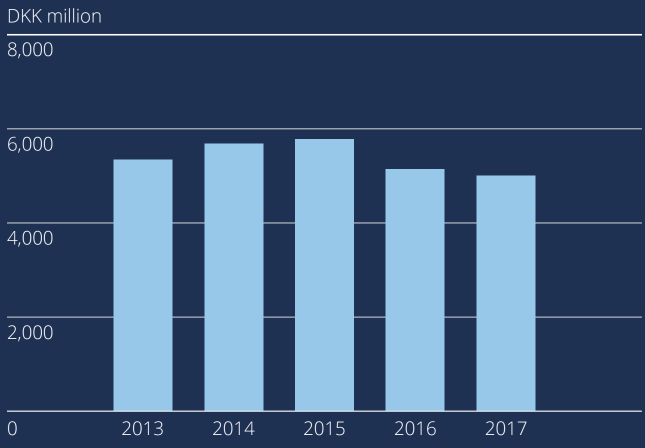
The financial results in 2017 were negatively impacted by the sale of Topsoe's emissions control business areas. The transaction was concluded on November 30, 2017, and included a fixed payment of DKK 900 million (adjusted for changes to an agreed normalized working capital level) plus a potential earn-out, which is dependent on buyer achieving certain targets in the coming years. We have conservatively estimated the value of this earn-out to zero in the 2017 accounts. Consequently, the losses relating to the discontinuing activities within the emissions control business areas amounted to DKK 422 million (mainly related to revaluation).

Net profit (after loss on discontinuing operations) decreased significantly and showed a loss of DKK 19 million for 2017.

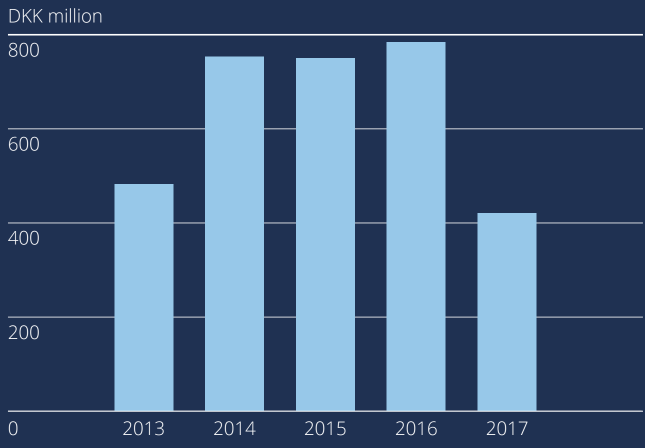
EBIT from continuing operations decreased by 27% to DKK 595 million corresponding to an EBIT margin of 11.9% (2016: 15.7%). Adjusting for the one-time effect in 2016, EBIT decreased by 14%.

R&D expenses were maintained at a high level with a R&D-to-revenue-ratio of 9.4% (2016: 9.6%).

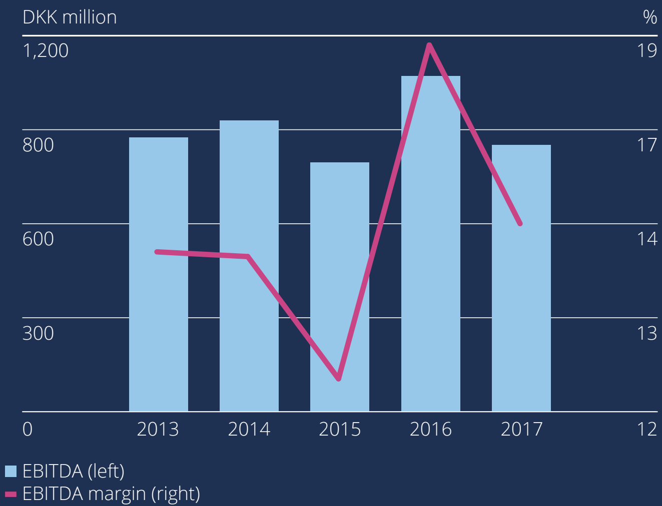
Revenue [1]



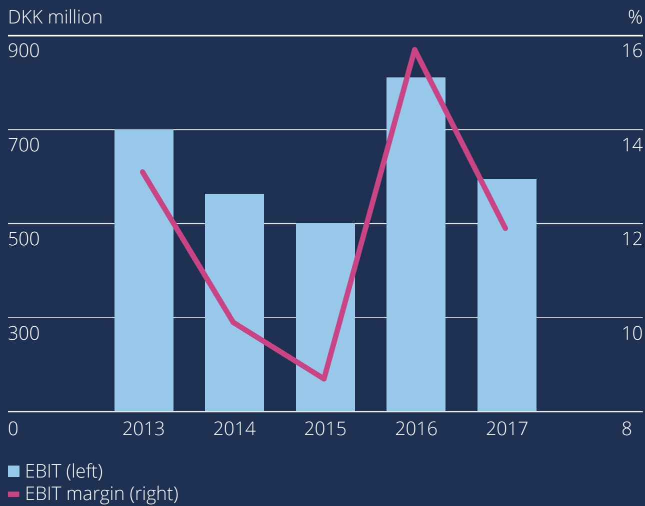
Cash flow from operating activities [1]



EBITDA [1]



EBIT [1]



[1] 2016 and 2017 figures reflect continuing operations only

Financial report

Income statement

Revenue

Revenue from continuing operations decreased by 3% to DKK 5,011 million (2016: DKK 5,150 million). Adjusting for the 2016 one-time effect, revenue in 2017 was on par with 2016. Exchange rate developments had a negative impact of 0.9% on revenue. Catalyst revenue increased by 4% (driven by 5% volume growth), and technology revenue decreased by 17% (of which 5 percentage points can be attributed to the one-time positive impact of restarted Iranian contracts of DKK 122 million in 2016).

Earnings before interest, tax, depreciation, and amortization (EBITDA)

EBITDA from continuing operations decreased by 20% to DKK 852 million, corresponding to an EBITDA margin of 17.0% (2016: 20.8%).

The 2017 contribution margin was lower than in 2016, mainly due to the one-time impact from Iranian projects of DKK 122 million in 2016, lower contribution from technology contracts, and lower catalyst contribution margins. Staff expenses amounted to DKK 1,539 million, which is on par with 2016. Raw material costs, including change in inventories, increased by 19% to DKK 1,301 million. Purchased equipment for contract work decreased by 21% to DKK 578 million due to decreased activity in our technology business. Other external expenses increased by 4% to DKK 756 million as a result of higher catalyst warranty provisions as well as freight costs due to the increase in catalyst volumes.

Earnings before interest and tax (EBIT)

EBIT from continuing operations decreased by 27% to DKK 595 million corresponding to an EBIT margin of 11.9% (2016: 15.7%). Resumed Iranian contracts had a positive EBIT impact of DKK 122 million in 2016. Depreciation amounted to DKK 257 million, which is on par with 2016.

Net profit

Net profit decreased to DKK -19 million (2016: DKK 492 million).

The decrease in the net profit is mainly explained by:

- A decrease in EBIT to DKK 595 million in 2017 (2016: DKK 811 million).
- A loss on sale of discontinuing operations of DKK 422 million.
- A DKK 116 million decrease in tax to DKK 126 million.

Cash flow and balance sheet

Cash flows from operating activities

Cash flows from operations amounted to DKK 137 million (2016: DKK 748 million). Net working capital increased by DKK 100 million and made up 13.1% of revenue (2016: 11.8%). Initiatives have been taken to reduce net working capital significantly and thereby strengthen cash flows from operating activities in 2018.

CAPEX

CAPEX decreased by 34% and amounted to DKK 284 million (2016: DKK 432 million).

Net indebtedness

Net indebtedness decreased by 28% and amounted to DKK 855 million (2016: DKK 1,191 million).

The interest bearing debt at the end of 2017 was DKK 1,846 million (2016: DKK 1,981 million).

DKK 129 million in surplus funds were placed with the holding company, Haldor Topsøe Holding A/S, as part of a cash pool arrangement (2016: DKK 234 million).

Return on invested capital (ROIC)

ROIC amounted to 22% (2016: 34%).

Order backlog

The order backlog amounted to DKK 3,508 million at the end of 2017 (a decline in continuing business backlog of DKK 362 million compared to the end of 2016), mainly as a consequence of progression on a number of technology projects during 2017 without Topsoe obtaining new orders of similar sizes. At the end of 2017, the catalyst order book was at a satisfactory level compared to previous years.

Outlook for 2018

Revenue

In 2018, revenue from continuing operations is expected to be in line with or slightly above the comparable 2017 revenue, i.e., above DKK 5,000 million. However, the revenue development will be significantly impacted by the level of new technology orders, and the progress of existing technology orders in some core markets (e.g. Iran). In some markets, project development is impacted by international sanctions and the project owners' ability to finance projects. Exchange rate developments, most notably the DKK/USD exchange rate, will also impact revenue.

EBIT

EBIT margin is expected to be in the range of 10-12% in 2018.

In 2018, we expect to maintain a high level of R&D and business development activities in excess of 9% of revenue.

Cash flow and funding

Operating cash flows (including working capital development) are expected to improve in 2018 compared to 2017 due to efforts initiated to reduce net working capital.

Topsoe's current funding position is strong, based on access to the corporate bond market, institutional banks as well as commercial banks. Committed revolving credit facilities are also in place. A DKK 500 million tranche of corporate bonds will expire in April 2018. This has been re-financed by a new European Investment Bank loan.

Topsoe intends to maintain a credit profile that matches that of an investment grade company during a business cycle. When market terms are attractive and there is a need, Topsoe will consider issuing additional corporate bonds as well as obtaining other credit facilities.

Forward-looking statements

Haldor Topsoe A/S' financial reports, whether in the form of annual reports or interim reports, as well as any presentations based on such financial reports, and any other written information released, or oral statements made, to the public based on this annual report or in the future on behalf of Haldor Topsoe A/S, may contain forward-looking statements.

These forward-looking statements are based on current plans, estimates and projections. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, which may be outside Haldor Topsoe A/S' influence, and which could materially affect such forward-looking statements.

Haldor Topsoe A/S cautions that a number of factors, including those described in the risk management part of this report, could cause actual results to differ materially from those contemplated in any forward-looking statements.

Risk management

Enterprise risk management

Topsoe operates an enterprise risk management program with quarterly reporting, followed up by reviews and mitigating activities. The program enables Topsoe to identify risks early, assess them, and implement mitigating actions.

The Topsoe Code of Conduct has been implemented throughout the organization, including policies covering anti-corruption, anti-money laundering, competition law, and other compliance issues. Our Code of Conduct is an example of a global mitigating action that is intended to prevent a series of potential risks related to business ethics and legal topics. In 2017, a global compliance hotline (whistleblower solution) was implemented. The compliance hotline is available at www.topsoe.com/Compliance-Hotline.

The general risk factors and the associated mitigating actions are outlined below.

Strategic and operational risks

Customer demand

Catalysts are involved in the vast majority of industrial chemical processes today. We see no indication of disruption in our core markets that will reduce demand or create substitute products, but we obviously cannot rule out such disruption in the future. A very significant part of our technical and catalytic solutions is based on fossil fuels, notably natural gas. If cost-competitive alternative energy sources emerged, it could have a significant impact on our current business. For new products, processes, and services that are being developed, our sales depend on market demand.

Intellectual property (IP) protection

As a highly innovative company, Topsoe pursues IP protection through for instance patents, trade secrets, trademarks, design, and copyright law. However, our IP could be challenged, invalidated, circumvented, or rendered unenforceable. Defending and prosecuting our IP rights are therefore of paramount importance.

Cyber security

As a knowledge based company, Topsoe is exposed to the risk of theft of confidential information. To mitigate the risk of Topsoe confidential information being disclosed through theft or fraud, an Information Security Roadmap has been established, focusing on identifying and adequately mitigating potential risk areas. As the risk profile is developing rapidly, and new risks areas can evolve, Topsoe is continuously measuring the efforts within this area and seek to mitigate new potential threats.

Raw material prices and availability

Raw materials are a significant cost component in our products, and prices can fluctuate considerably. We seek to mitigate this risk through escalation clauses in customer contracts. The escalation clauses are linked to market indices. In addition, we use financial hedging to a certain extent. We also seek to have multiple suppliers for each raw material. We are exposed to single source risk on some raw material supplies, which makes us vulnerable to cost increases and which can potentially influence the upstream supply chain. The single source raw materials and suppliers are continuously assessed and we work actively to mitigate and limit our single source exposure.

Operations

Topsoe's production of catalysts takes place in Frederikssund (Denmark) and Houston (United States). If production is closed down for an extended period in one of our plants – e.g. due to damage to the production facilities (caused by fire, flooding, wind storm, etc.), equipment failure or cyber attacks – or if commissioning of a new production line is substantially delayed, it could have a material impact on Topsoe's earnings. We seek to mitigate this risk by operating multiple production lines for key products and enforcing a safety stock policy. We have also taken out business interruption insurance and property insurance.

Topsoe is exposed to project execution risk on technology projects. Systematic project management seeks to limit the risk of delayed deliveries, re-engineering, and cost overrun.

Issuance of bonds in support of contractual liabilities is an inherent and necessary part of Topsoe's business model, for instance in the form of bid bonds, advance payment bonds, and performance bonds issued by banks on behalf of Topsoe. Risk mitigation includes thorough structuring of contracts and related bonds.

Insurance

Besides property insurance and business interruption insurance, a number of other operational risks are insured, including general liability, product liability, professional indemnity and transportation.

Geopolitical risks

Topsoe's global presence exposes earnings to geopolitical events. Political actions, such as embargoes, sanctions, trade barriers, new taxes, currency restrictions, and changes in environmental legislation, etc., may impact results

Reactor internals are inspected before shipment.

and cash flows. To a certain degree, this risk is mitigated by monitoring regulatory initiatives, geographical diversification, and by ensuring – to the extent possible – that cash flows are maintained positive for our individual contracts. New political sanctions or cancellation of existing political sanctions could potentially have a significant impact on our business. Our regulatory monitoring and business integrated compliance measures ensure that Topsoe is at all times compliant with applicable international sanctions.

Financial risks

Currencies

As Topsoe operates globally, the income statement, balance sheet, and cash flows are subject to the risk of currency fluctuations, mainly in relation to Topsoe's flows of EUR, USD, and CNY.

Part of this risk is mitigated through natural hedges arising from activities where Topsoe has both income and expenses in the same currency. However, the risk is not fully covered by natural hedges, and consequently Topsoe hedges certain future cash flows. A 5% increase in the USD/DKK exchange rate is assessed to have a positive EBIT effect of DKK 15-20 million.

Interest rates

Long-term debt consists of loans and bonds with fixed and floating interest rates. Topsoe's policy is to maintain a loan portfolio where 35-50% is subject to floating interest rates and where 50-65% is subject to fixed interest rates. For the floating rate portion of Topsoe's interest-bearing debt, a change in the interest rate level of 1 percentage point will increase interest expenses by DKK 7 million.

Credit

The credit risk of Topsoe is primarily related to trade receivables from state-owned as well as privately owned corporations. Where feasible, we seek to mitigate credit risk by applying instruments such as letters of credit and bank guarantees as well as selective structuring of payment terms, etc. On a quarterly basis, it is assessed if the company should make accruals for bad debt, which is considered unlikely to be collected.

Counterparties

In this context, counterparty risk is defined as credit risk on financial institutions when dealing with them, either by placing deposits, entering into derivative financial instrument transactions, or otherwise. In order to reduce counterparty risk, Topsoe only deals with financial counterparties that Management believes have a satisfactory credit rating from a recognized international credit rating agency.

Liquidity
Topsoe must maintain sufficient liquidity to fund daily operations, debt service, and expansion. Topsoe's access to liquidity consists of cash and cash equivalents, including access to committed revolving credit facilities. The target is to maintain a minimum of DKK 500 million in unused committed revolving credit facilities at any time.

Restrictive covenants
Some of the financing arrangements of Topsoe are subject to financial covenants, and if violated, this could limit the ability to finance the company's operations and capital needs for acquisitions and other business activities. Covenants include equity ratio (min. 20%), interest coverage (min. 5), and leverage (net debt/EBITDA) requirements (max. 3,5).

Dividend policy
Haldor Topsoe Group finances the operations of Haldor Topsøe Holding A/S through dividend payments. The liquidity effect of the expected future dividend payments has been incorporated in the cash flow forecasts of Haldor Topsoe Group. The dividend potential must take into account covenant requirements.

Tax
Topsoe's business structure with entities and/or business activities in many countries implies that a number of different direct, indirect, and collected taxes apply on a global basis. The combination of complexity in our business and our business structure requires dedicated focus on tax management; a focus that always respects international tax principles and local tax law, while managing the tax cost and tax risk of Topsoe. Topsoe will at all times use its best endeavors to comply with the tax legislation in the countries in which it operates, in accordance with OECD standards. When needed, Topsoe seeks to clarify uncertainties by involving external advisors and by taking a justifiable position in accordance with international tax principles and in alignment with Topsoe's Code of Conduct. Topsoe's tax management is documented in a global tax policy.

Topsoe's global engineering team work together across regions.

Corporate social responsibility and **sustainability**

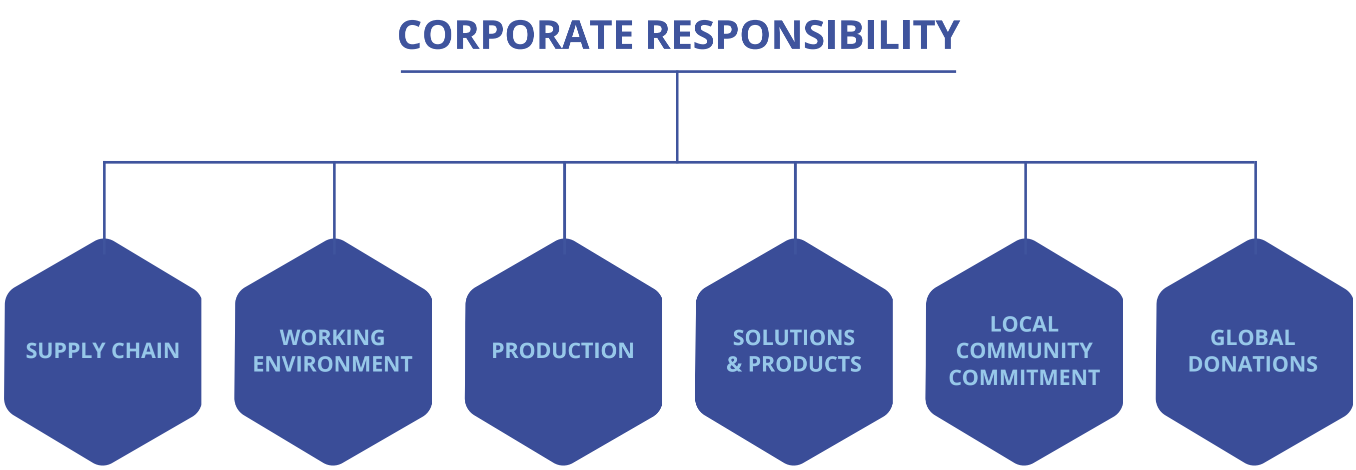
We continuously strive to create sustainable solutions that make a difference in the world of today – and tomorrow – and we are committed to ensure that our solutions as well as our conduct are economically, environmentally, and socially sustainable.

Acting responsibly in all aspects of our business is a fundamental element of our values – expressed in the Topsoe Spirit – that serve as the foundation for how we do business in a complex, international business environment with cultural, political, and legal challenges.

Our Code of Conduct puts our values into action by providing a common framework that helps everyone understand the standards of behavior we expect of each other, as well as the laws and regulations we must all comply with in our day-to-day work. This includes speaking up if we come across a situation that is inconsistent with our Code of Conduct or values.

As stated in our Corporate Social Responsibility (CSR) and Sustainability policy, it is important for us to conduct every aspect of our business with honesty, integrity and openness, respecting human rights and the interests of our employees, customers, and third parties. Not only are we committed to creating and maintaining a safe and healthy working environment for our employees, we also strive to create a workplace with mutual trust and respect, and where every person is responsible for the performance and reputation of our company. This is very much in line with a central principle on which Topsoe was founded, namely that the company must be a "great place to work and have worked".

The Topsoe Corporate Responsibility framework



Compliance Hotline
In 2017, Topsoe launched our Compliance Hotline - a whistleblower solution, for serious concerns and grievances. The hotline offers employees a possibility to report serious concerns in case they are not comfortable with discussing these concerns with their manager or other colleagues.

This new process and tool has been introduced as a supplement to our existing strong culture for speaking up, where many dilemmas and concerns are successfully tackled through open dialogue and direct communication.

The hotline has been well received and has sparked constructive conversations about both ethical business conduct and our expectations of each other as well as of external stakeholders.

Third party assurance policy
In 2017, we implemented a Third Party Assurance Policy. We operate in an increasingly complex geopolitical environment and ensuring compliance with all applicable international rules and regulations is of highest priority for us.

The policy was implemented to increase transparency and overview of current due diligence procedures. As an early result, we experience greater assurance that all relevant risks are mitigated when venturing into new partnerships and business relations, and in addition we get a deeper understanding of our own business and the world around us.

Global standards and training
The Topsoe Code of Conduct was launched in 2014 and employees across the globe were trained in 2015. We have decided to retrain our employees in the Code of Conduct to ensure that everyone knows what is expected of them, and what they can expect from management. In 2017, we began developing a bespoke compliance and sustainability e-learning course focusing on dilemma-based awareness training. The training will be implemented globally during 2018.

Enhancing our operating standards
In 2017, we conducted an overall compliance and sustainability assessment to measure and document our status and progress on internal processes that are critical for our business and expected from customers, business partners, and regulators. The assessment verified that we have strong measures in place in key areas, e.g., when it comes to protecting our knowledge and know-how, as well as procedures that minimize the risk of corruption.

We have also developed our Corporate Responsibility Framework by defining concrete actions and milestones to be implemented in 2018 and forward.

The Corporate Responsibility Framework is a structured approach that allows management to drive progress on corporate social responsibility and sustainability across Topsoe's global organization. The framework provides transparency of CSR-related efforts in our business.

Supply chain

In 2017, we have undertaken preliminary assessments of the potential for working strategically with CSR in our supply chain. The outcome of our analysis was a number of CSR-related projects that will be integrated into our sourcing strategy and monitored in our Corporate Responsibility Framework.

Working environment

We take responsibility for, and do our utmost to ensure, the safety and well-being of more than 2,300 employees globally because it is a core value to us and because continuous development of our working environment is of strategic importance.

Increase in accidents, decrease in severity
Despite our continuous and very committed safety focus at board level, in top management, and across the organization, we have seen an unsatisfactory trend in the number of accidents in 2017. Even though the number of accidents involving higher severity or risk, e.g., when handling chemicals, have decreased, less severe accidents such as slips, trips and falls related to everyday tasks have increased.

Improving health and safety culture
Reducing the number of accidents is a top priority for Topsoe. The health and safety of our employees is paramount to everything we do, and it is a core value to ensure that our employees are safe when working for Topsoe, thus supporting that Topsoe is a "great place to work and have worked". Extensive efforts have therefore been made to improve our health and safety awareness throughout the company in 2017.

In addition to providing structured guidance in the use of procedures and instructions, we see culture as

Rigorous health and safety procedures apply in the catalyst production facilities.

a key means to adress and reverse the negative trend. Safety awareness needs to be embedded into everyday actions, and a number of initiatives have therefore been implemented to ensure that all employees are reminded that even everyday actions may deserve a sound risk assessment.

Around half of our accidents happen while employees perform everyday tasks that may not seem risky at first glance. To raise employees' awareness of these risks, we will increase our safety initiatives on lifting and roll out a dedicated campaign on slips, trips, and falls in 2018.

However, building a strong and proactive culture requires a long-term effort, so health and safety will continue to be at the top of the agenda in 2018.

Health and safety training

Improving the safety competencies of managers is a cornerstone in our efforts to improve our health and safety culture and reduce the number of accidents. In 2017, all managers with direct reports in our headquarters in Denmark were trained in their health and safety duties and responsibilities. In 2018, this training will be rolled out globally.

A basic principle of our health and safety culture is that the person handing over a task also assumes responsibility for ensuring safe conditions.

Mental well-being

On a national level in Denmark, we see an increase in illnesses related to the psychological working environment.

In 2017, we therefore made mental well-being a central element of the health and safety training for all managers, so that they are better capable of identifying and supporting employees who may experience psychological strain as a consequence of their working environment.

Production

At Topsoe, we provide solutions for our customers that contribute to a sustainable future for society, and our internal aim is to maintain an effective and consistent approach to reducing our environmental impacts. We strive to conduct our daily operations in an environmentally sound way by reducing waste and using less resources and energy.

We consider our environmental impacts in our entire value chain, from product development to the delivery to our customers, by evaluating materials and processes that constitute a potential risk to the environment.

Policy commitment
Our global environmental policy describes how we continuously identify, evaluate, and implement measures to lower our environmental impact.

Our catalysts and know-how enable our customers to improve their environmental footprint substantially. Yet, it is not possible to produce our catalysts without environmental impacts and without using chemicals that can potentially harm the environment and people if they are not handled correctly. Therefore, all employees dealing with chemicals go through extensive mandatory training prior to undertaking any assignments so that we can ensure that our facilities are as safe as possible.

Reduced impact
In 2017, we lowered our environmental impact by installing a new condenser at our production site in Denmark. In addition, the condenser provides excess heat to our neighbors and will consequently reduce CO_2 emissions from the local district heating plant.

In 2017, we delivered 34,514 MWh to the Frederikssund district heating plant. The excess heat from Topsoe's plant means that the district heating plant has avoided to incinerate 3,137,636 Nm^3 of natural gas, thereby reducing their CO_2 emission by 7,082 tons.

34,514 MWh per year is enough to heat more than 1,900 single-family houses in the Frederikssund area where our plant is located.

Solutions and products

Topsoe supplies catalysts, proprietary technologies, process design, engineering, and services for the chemical and refining industries primarily.

Dedication to science
We are at the forefront when it comes to developing sustainable catalytic technologies and it is through our dedication to science that we have our largest positive impact.

We see it as our corporate responsibility to drive innovation, and we reinvest 9-10% of our revenue in research and development.

Much of our research targets scientific solutions to pressing global challenges, such as improving energy efficiency, enhancing food production, and protecting our environment and the climate.

Bio-based chemicals
Catalysis is essential in the production of chemicals from fossil fuels, and in addition we see and follow the global trend towards looking for new ways to produce chemicals based on renewable resources.

In 2017, Topsoe entered into a research and development partnership with Braskem, a leading producer of thermoplastic resins in the Americas. The partnership was set in motion to explore and commercialize MOSAIK™, a new Topsoe technology to produce chemicals from biomass, which we see as a commercial opportunity.

The partnership aims to develop a pioneering route to produce monoethylene glycol (MEG) from sugar. MEG is a basic building block used in, e.g., polyester fabrics and PET plastic. We expect to be able to produce MEG at an attractive cost that can compete on commercial terms with MEG made from fossil sources.

The agreement calls for the construction of a demonstration plant in Denmark, with operation estimated to begin in 2019. Topsoe will deliver a packaged solution for this project with Braskem, including catalyst and technology. The companies will combine their expertise to further develop, test and validate the process. The overall goal of the partnership is the start-up of a commercial plant by 2023.

The partnership with Braskem indicates that chemicals from biomass can be a commercially attractive option, even in a tough, mature market such as thermoplastic resins. Catalysis will play an important role in the development of new solutions that can produce chemicals from renewable sources on commercial terms.

We have dedicated our capabilities within catalysis to accelerate this process for the benefit of our customers and the environment.

The Sunderbans School project benefits 500 poor children and their communities in West Bengal, India.

Donations and community commitment

Our founder, Dr. Haldor Topsøe, learned at an early age that not all people are equally privileged with sufficient food, housing, and education. During the Great Depression and the Second World War, he experienced this personally and it influenced how he led the company throughout his life. Together with his wife, Dr. Topsøe began supporting organizations and people engaged in humanitarian work all over the world. On his many business trips, Dr. Topsøe would regularly seek out and support people in need. Today, Dr. Topsøe's spirit and engagement lives on through our Donation Committee.

Contributing globally and locally
For Dr. Topsøe, it came naturally to help address local challenges and needs in the countries he visited. Even today, he is remembered for his significant leadership in connection with the Green Revolution in India and Bangladesh, which impacted the lives of millions of farmers.

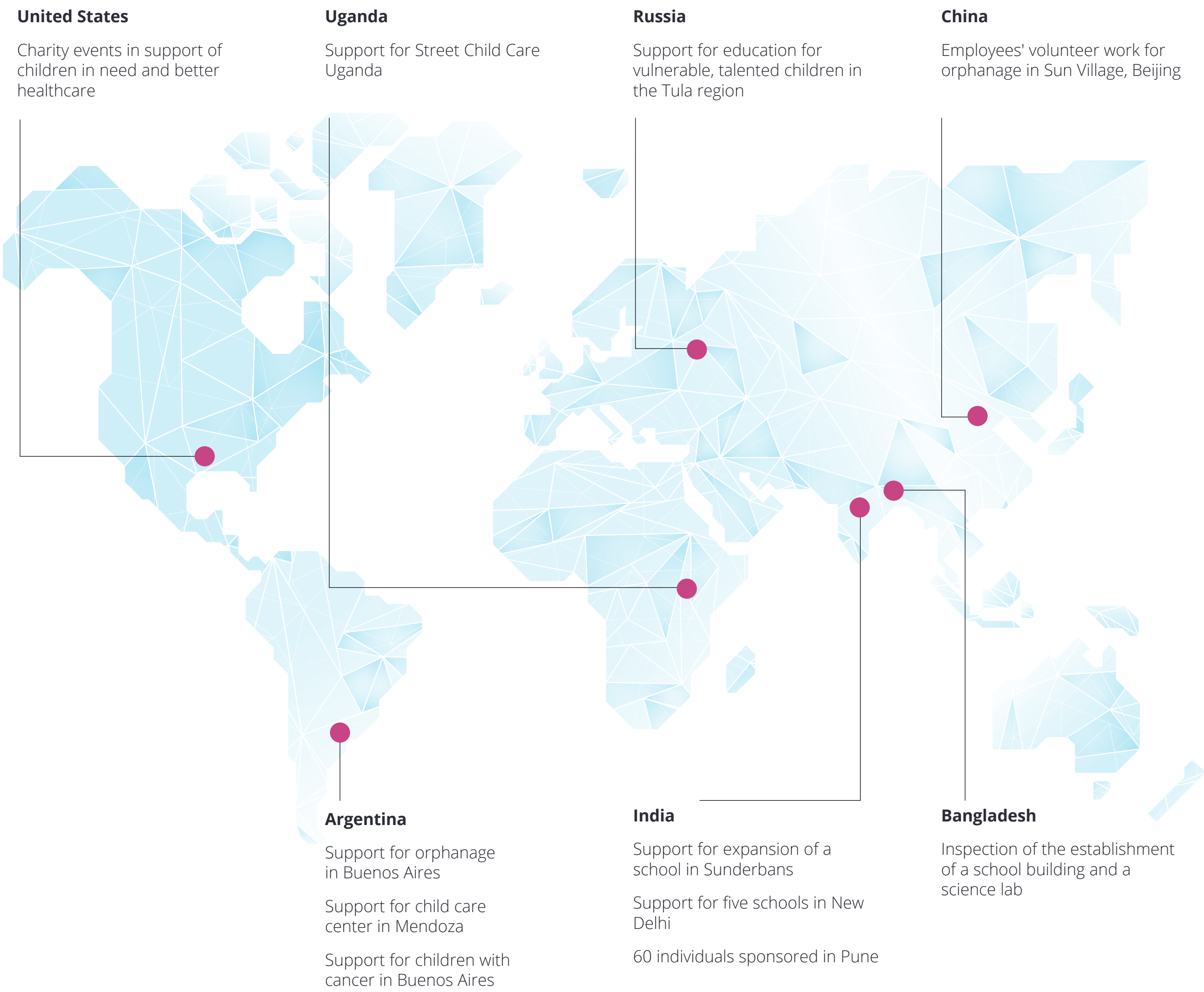
Dr. Topsøe said: "The corporate world in itself means nothing unless it improves the lives of people and the conditions in poor countries", and as a company, we ensure that his responsible attitude lives on, at both the global and the local level.

The Donation Committee meets four times a year to evaluate ongoing and new projects. The projects are assessed based on a set of principles, focusing primarily on supporting children in need, often with education as a central part.

Help children, pass on knowledge
At Topsoe, we aim to inspire others with our passion for science and by supporting young people in less fortunate circumstances in pursuing an education. We feel that ensuring knowledge through education is one of the most efficient ways of helping to improve lives.

Sustainable development in India
The largest project that Topsoe has supported in the past decade is in Sunderbans, India. Similar to the other projects that are driven out of Topsoe's headquarters, with dedicated support and involvement from members of the Topsoe family, the approach has focused on making efforts sustainable.

Through ongoing dialogue with local stakeholders and with emphasis on investing in buildings, the school project for the benefit of 500 poor



children in West Bengal is now almost completed. The school has grown over the years, and today six buildings support the daily education and activities. The school's popularity has also grown in recent years, and today it attracts children from far away.

The school was initially provided with operational support, but this has been gradually reduced, and today the school requires a small fee from parents who can afford it. Teachers, the administrative personnel at the school, and not least a local NGO, have been the primary drivers for the project to succeed so well. The children are thriving at the school, and the local society will for sure benefit from the increased access to education.

Local support

At many of Topsoe's regional offices across the globe, we meet people who dedicate their lives to making a difference for other people in tough or even desperate situations. Often, we wish to support these necessary and inspiring efforts, and our regional offices make a number of contributions to local organizations. One example is the Maria Cecilia Foundation that our Argentinian office supported in 2017.

The Maria Cecilia foundation began offering free treatment for children with cancer in 1995. Today, the organization treats more than 4,000 children every year. The treatment is available to children who do not have health insurance and cannot finance their treatment by other means.

The treatment center is located in the northern part of Buenos Aires and provides chemotherapy, medical treatment, medicine, and psychological support for the children's parents.

Topsoe's regional offices in China, India, Russia, and the US also engage with their local communities directly or through organizations and charities.

Diversity

With regional offices and production plants in more than 10 countries, our global footprint is in itself embedding diversity in terms of cultures and nationalities. The same can be said of our headquarters in Denmark where we have attracted many talented non-Danes over the years. We believe that an inclusive working environment can foster great teams and results, so we pursue opportunities to strengthen diversity through increased mobility and when hiring new employees.

Hiring the best

When we hire people, it is our policy to get the right candidate for the job, regardless of gender, nationality, age, sexuality, religion, culture, etc. And to ensure that we continue to develop as an inclusive and diverse company we have in 2017 established first a career framework with defined tracks, and secondly a competence framework, both with the aim to guide the development of our employees in a structured and targeted way.

Equal opportunities

Our approach to diversity and inclusion among other things means that we want to ensure an optimal gender representation in all our career tracks, including our leadership pipeline.

To quantify our early actions and to best direct our efforts globally, we measure the gender ratio amongst our applicants and job interviewees.

In 2017, we had 75% male and 25% female applicants. Out of the candidates invited for a job interview, 70% were male and 30% female, which is an increase from 23% interviews with women in 2016.

We use this data-based overview of our selection process to qualify the dialogue about diversity with hiring managers, which could in turn increase the share of female employees at Topsoe and lead to a higher level of diversity.

Diversity in management

The gender ratio across all Topsoe locations is 29% female and 71% male. In 2017, the share of female employees grew by one percentage point from 28% in 2016.

Our target for the ratio of women in leadership positions is 30% by 2020, a target that we will include in our work when revising our current policy in 2018.

The recent hiring of Amy Hebert, Deputy CEO and EVP, Chemical Business Unit, has increased diversity in top management.

Gender representation in our Board

The Topsoe Board of Directors have seven members, not counting employee representatives. There are six male and one female Board member, which equals 14% women.

In 2013, the Board set a target to reach two female Board members by the end of 2017. This target has been carefully considered when members have been replaced or added to the Board, however, it has not been possible to identify and appoint new female members of the Board. The revised target is 28% women in the Board of Directors by 2020. The Board of Directors continue to focus on this target when evaluating its composition, competencies, and future candidates.

The overall status for gender representation can be found on our corporate website: https://www.topsoe.com/about/corporate-social-responsibility/gender-representation

Our **leadership**

Corporate **Governance**

Topsoe has a corporate governance structure in place which specifies how our business is led and controlled. In 2017, the Board of Directors and its committees have further optimized its processes and collaboration.

We continue to ensure that key governance principles are developed and implemented, keeping Topsoe on par with enterprises we consider our peers. As an example, in 2017 it was decided to implement a non-Board committee to focus on Compliance and Sustainability. The first meeting took place in February 2018.

In 2018, the election of employee representatives for the Board of Directors will take place.

Shareholders

Topsoe is a 100% family-owned company through the company Haldor Topsøe Holding A/S, which belongs to the Topsøe family.

The family's strong commitment to Topsoe's long-term growth strategy and continued development is fundamental to maintaining an innovative and sustainable company culture in line with the spirit of our founder.

Board of Directors

The company has a two-tier management structure anchored in the Board of Directors and the Executive Committee. The Board is an advisor to and supervisor of the Executive Committee and has particular focus on formulating, revising, and reviewing the company strategy. The two-tier management structure ensures complete separation of roles and responsibilities, where no person serves as a member of both.

Board Committees

Finance Committee

In 2010, Topsoe established the Finance Committee, which is responsible for assisting the Board in fulfilling its oversight responsibilities by reviewing and monitoring the company's financials. The Finance Committee consists of three members elected by the Board among its members:

Jakob Topsøe (Chairman), Jeppe Christiansen, Anders Heine Jensen.

Remuneration Committee

In 2013, the Remuneration Committee was established to ensure appropriate policies for fair employee and Board pay. The Remuneration Committee consists of three members elected by the Board among its members:

Jørgen Huno Rasmussen (Chairman), Jeppe Christiansen, Jakob Topsøe.

Innovation Committee

In 2016, the Innovation Committee was established and tasked with helping to ensure that Topsoe remains a leader in catalytic innovations within its business areas. The Innovation Committee consists of four members elected by the Board among its members:

Jens K. Nørskov (Chairman), Christina Topsøe, Henrik Stiesdal, Søren Toft, and non-Board member Henrik Topsøe.

Donation Committee

In addition to the Board Committees, Topsoe has a Donation Committee which reviews incoming requests for donations and support that Topsoe provides to local communities. The Donation Committee consists of members from the Board of Directors of Haldor Topsøe Holding A/S, members of the Topsøe family, and management representatives from the Topsoe Group. Currently, the members are:

Birgitte Øigaard (Chairman), Christina Topsøe, Henrik Topsøe, Nan Topsøe, Bjerne S. Clausen, and Peter Rønnest Andersen.

A current list of all members of the above committees is available on our corporate website: www.topsoe.com/about/governance.

Executive Committee

The responsibility for the daily operations of Topsoe lies with the Executive Committee. The team meets weekly and consists of the CEO, the CFO, the Deputy CEO, and the two other heads of the business units. Responsibilities include overall business conduct, drafting, setting and implementing strategies and policies, and ensuring sufficient reporting to the Board of Directors.

Compliance & behavior

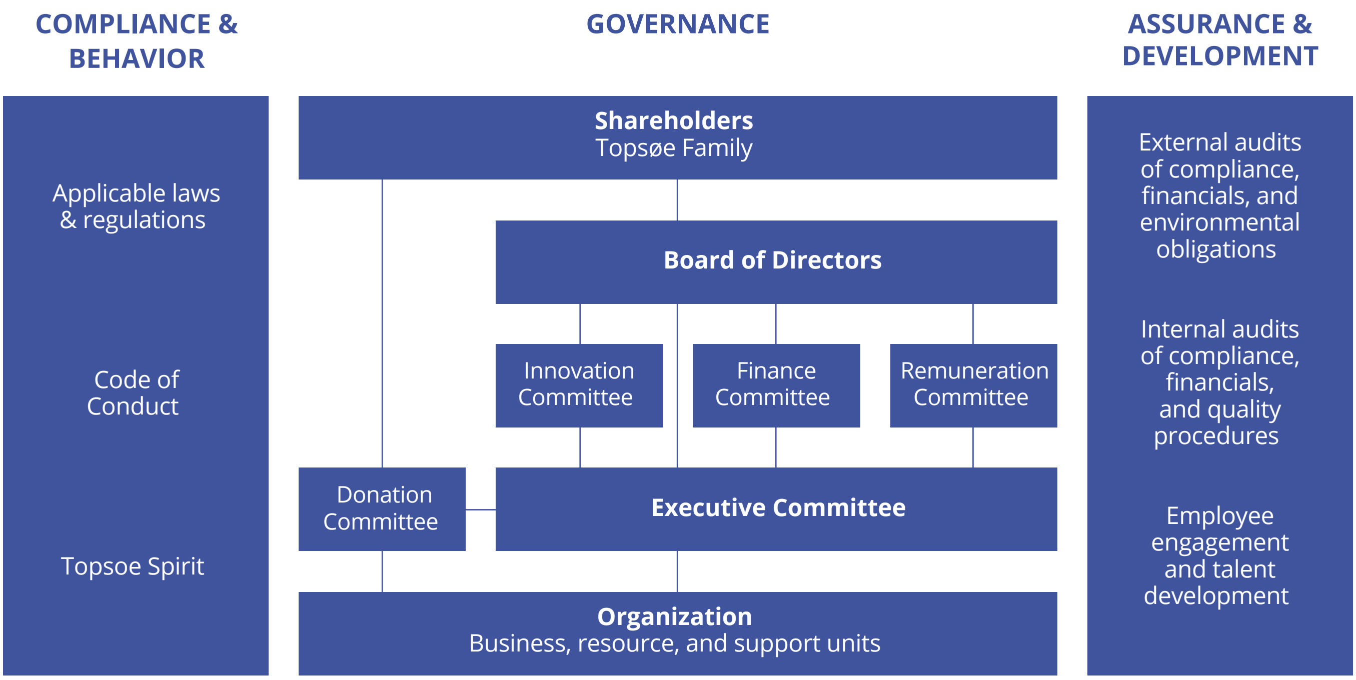
Understanding external expectations, working diligently to meet these requirements, and staying true to the Topsoe Spirit is fundamental to Topsoe.

At Topsoe, our Code of Conduct and underlying policies and procedures ensure that we comply with applicable international laws and regulations. The Topsoe Spirit defines our company values and guides our interactions, decisions, and actions.

Assurance & development

Operating in a financially responsible manner, improving and certifying processes to meet high business standards, and developing our people are important elements to ensure a sustainable business model.

Both external and internal measures are taken to audit, review, and continuously develop our processes as well as our employees.



Board of Directors

Jeppe Christiansen
Chairman

Jeppe Christiansen is CEO of Fondsmæglerselskabet Maj Invest A/S and Maj Invest Holding A/S. Furthermore, Mr. Christiansen is member of the executive management of Maj Invest Equity A/S, Det Kgl. Vajsenhus, and EMLIKA ApS. Mr. Christiansen is Chairman of the Board of Directors of EMLIKA ApS and Vice Chairman of the Board of Directors at Novo Nordisk A/S and Maj Bank A/S. He is a member of the Boards at Novo Holdings A/S, Kirkbi A/S, Symphogen A/S, and Maj Invest Equity A/S. He holds an MSc in Economics from the University of Copenhagen.

Jørgen Huno Rasmussen
Vice Chairman

Jørgen Huno Rasmussen is Chairman of the Boards of TryghedsGruppen, Trygfonden, Tryg Forsikring A/S, LFI A/S, and the Lundbeck Foundation. He is Vice Chairman of the Boards of Terma A/S and Rambøll Group A/S. He is member of the Boards of Otto Mønsted A/S, Thomas B. Thriges Foundation, and Bladt Industries A/S. Mr. Rasmussen has previously been CEO of FLSmidth and Hoffmann A/S. He holds an MSc and a PhD from the Technical University of Denmark, and a Graduate Diploma in Business Administration from Copenhagen Business School.

Jakob Haldor Topsøe
Vice Chairman

Jakob Haldor Topsøe is Chairman of the Board of Haldor Topsøe Holding A/S and a member of the Boards of Haldor Topsoe Inc., IGM Biosciences A/S, Motortramp A/S, and Dampskibsselskabet Orients Fond A/S. Mr. Topsøe is Associated Partner at AMBROX Capital A/S. He has previously been Head of Equities at ABN AMRO Bank in Denmark. Mr. Topsøe holds a Graduate Diploma in Business Administration from the Copenhagen Business School.

Anders Heine Jensen
Member

Anders Heine Jensen is CEO of Burmeister Wain Scandinavian Contractors A/S. He has previously been Senior Director with DONG Energy. Mr. Jensen is Chairman of the Board of Directors of Monberg & Thorsen A/S, Vice Chairman of the Board of Directors of MT Højgaard A/S and member of the Board of Danish Energy Industries Federation. He holds an MSc in Mechanical Engineering and Energy from the Technical University of Denmark and a Graduate Diploma in Business Administration from Copenhagen Business School.

Jens Kehlet Nørskov
Member

Jens K. Nørskov is the Leland T. Edwards Professor in the School of Engineering at Stanford University, and Director of the SUNCAT Center for Interface Science and Catalysis, also at Stanford University. Dr. Nørskov has previously been Professor at the Technical University of Denmark. He is a member of the editorial board of several journals and has received a large number of honors and awards. Dr. Nørskov is a member of several boards, advisory boards and professional organizations. He holds a PhD from Aarhus University.

Henrik Stiesdal
Member

Henrik Stiesdal is a leading figure within wind power and has been CTO of Siemens Wind Power through 27 years until he retired in 2014. Mr. Stiesdal has received a large number of awards, including the Poul la Cour Prize of the European Wind Energy Association in 2011 and the German Renewables Award for Lifetime Achievements in Wind Energy in 2014. He has studied medicine, biology, and physics at the University of Southern Denmark.

Christina Teng Topsøe
Member

Christina Teng Topsøe is a former lawyer and practiced law in London and Singapore for Allen & Overy and Simpson, Thacher and Bartlett. Ms. Topsøe is a member of the Boards of Haldor Topsøe Holding A/S and IGM Biosciences A/S. She studied Chinese at the University of Copenhagen / Peking University and law at the University of London. She holds an MBA from London Business School and Columbia Business School.

Jette Søvang Christiansen
Employee representative

Jette Søvang Christensen is Quality Assurance Manager in Catalyst Production. Ms. Christiansen holds an Academy Profession Degree in technology. She has been with Topsoe since 1986.

Aino Irene Saldo
Employee representative

Aino Irene Saldo is IT Project Manager in IT Project Management Office. She has been with Topsoe since 2000 and has been Vice Chairman of the Working Council and Chairman of the Board of the Staff Association before joining the Topsoe Board. Ms. Saldo holds a MSc in Chemistry from the Technical University of Denmark.

Søren Toft
Employee representative

Søren Toft is Principal Engineer and Senior Project Manager in Global Supply Unit. He has been with Topsoe since 1981 working with project development and execution. Mr. Toft holds a BSc in Mechanical Engineering from Engineering College of Copenhagen and a Graduate Diploma in Business Administration from Copenhagen Business School.

Martin Østberg
Employee representative

Martin Østberg is R&D Manager and Project Leader in R&D. He has been with Topsoe since 1998 and has authored and co-authored a large number of scientific publications and patents. Dr. Østberg holds a BSc and PhD in chemical engineering.

Executive Committee

Bjerne S. Clausen
President and CEO

Bjerne S. Clausen has been President and CEO since 2011. He joined the Executive Committee in 2006 as Director of Research & Development and became Executive Vice President of the Technology Division in 2008. Dr. Clausen joined Topsoe in 1979.

Dr. Clausen holds an MSc and a PhD in Materials Science from the Technical University of Denmark (DTU) and was awarded an honorary doctorate from DTU in 2014. Dr. Clausen is Adjunct Professor at both DTU and University of Aarhus, Denmark, and has been appointed Visiting Professor at the Business School of Nankai University, China.

Dr. Clausen has served on numerous research and industrial boards and committees. He is currently Chairman of the Board of iNANO, the Interdisciplinary Nanoscience Center, University of Aarhus, he is member of the Advisory Board of the Department of Chemical Engineering, DTU as well as member of the Confederation of Danish Industry's Committee on Business Policy.

Amy Hebert
Deputy CEO and EVP Chemical Business Unit

Amy Hebert joined Topsoe as Deputy CEO and Executive Vice President, Chemical Business Unit, in February 2018. Previously, she has been Vice President Europe with Celanese and Global Vice President Catalysts with Albemarle. She comes to Topsoe with over 20 years' experience in the chemical industry. Ms. Hebert is responsible for the chemical catalysts and licensing business unit as well as the regional offices.

Ms. Hebert holds a B.S. in Chemical Engineering from Georgia Institute of Technology, Atlanta, Georgia.

Ms. Hebert has been member of the board of Cefic (the European Chemical Industry Council) and a number of joint venture companies.

Peter Rønnest Andersen
CFO

Peter Rønnest Andersen has been member of the Executive Committee as Executive Vice President and Chief Financial Officer (CFO) since 2013. Before that, Mr. Andersen was with the A.P. Moller - Maersk Group for more than 20 years, including 15 years as CFO and member of the executive committee in various divisions, of which 5 years as Senior Vice President and CFO of Maersk Line. Mr. Andersen has extensive board experience as a chairman and member of the boards of a number of companies and joint ventures in Denmark and several other countries. From March 2018, he is a member of the board of Ejnar and Meta Thorsen's Foundation.

Mr. Andersen holds an MSc in Economics from the University of Aarhus, Denmark, and an Executive MBA from IMD, Switzerland. He has completed extensive leadership training at Cranfield School of Management (UK), Penn State University (USA), and Harvard University (USA).

Morten Schaldemose
EVP, Refinery Business Unit

Morten Schaldemose has been Executive Vice President and head of Refinery Business Unit, since 2013. Mr. Schaldemose is responsible for the company's products and services to the refining industry. He has held a number of positions in Topsoe centered on the refinery business, including Head of Marketing and Sales. Mr. Schaldemose joined Topsoe in 1997 after working at Kuwait Petroleum International. In an interim period, he served as COO and CEO of a number of cleantech companies before rejoining Topsoe.

Morten Schaldemose holds an MSc in Chemical Engineering from the Technical University of Denmark and an EMBA with distinction from INSEAD.

Kim Grøn Knudsen
EVP, Sustainables Business Unit

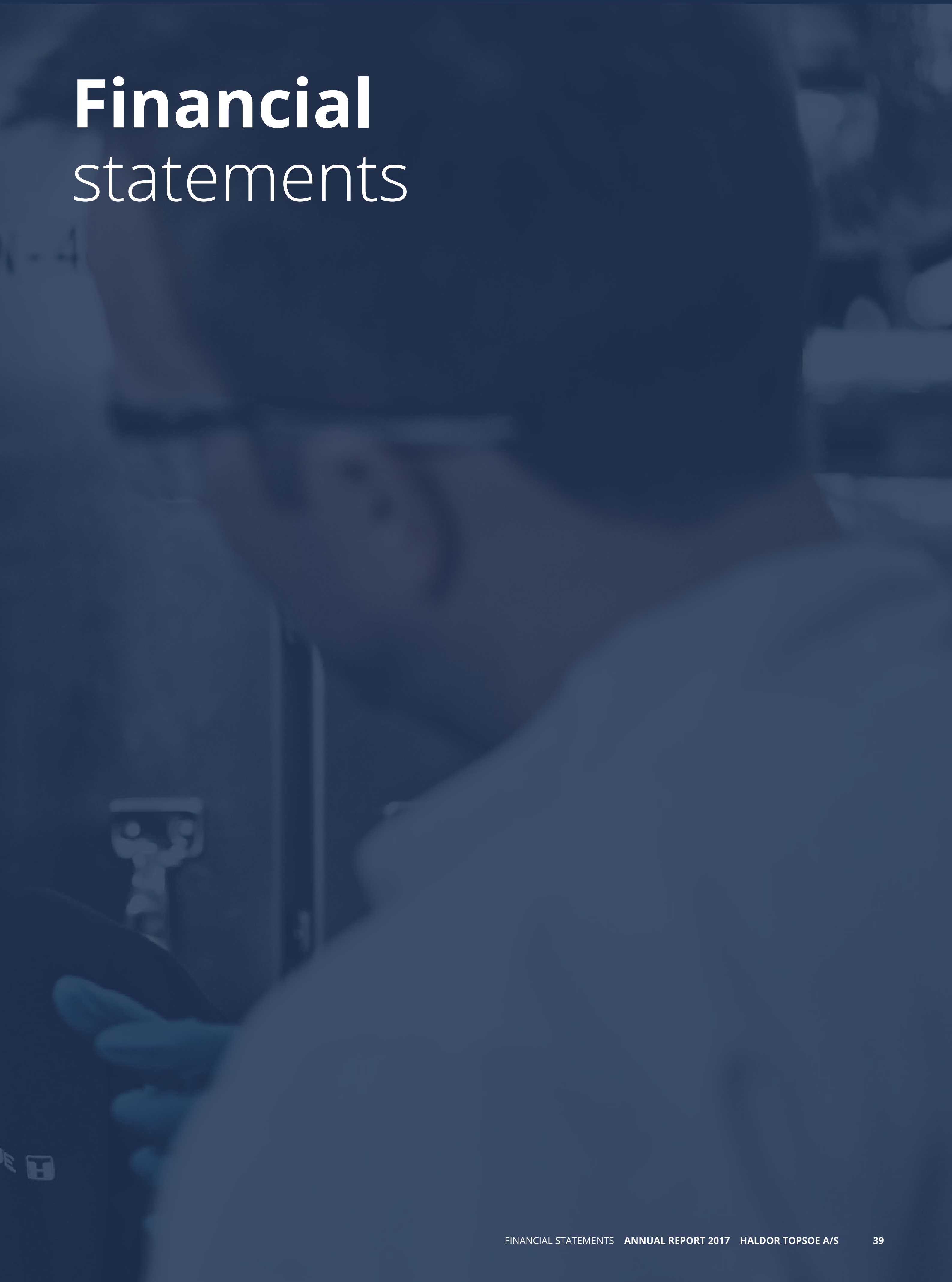
Kim Grøn Knudsen is Executive Vice President, Sustainables Business Unit. He has been a member of the Executive Management since 2012. He has held a number of positions within Topsoe's Research & Development unit, including Vice President. Mr. Knudsen joined Topsoe in 1996, leaving a position as Research Associate Professor at the Technical University of Denmark.

Mr. Knudsen holds a MSc and a PhD in Chemical Engineering from the Technical University of Denmark.

Mr. Knudsen holds several patents and is the author and co-author of more than 55 papers.


HALDOR TOPSO

Financial statements



Consolidated income statement

DKK million	Note	2017	2016
Continuing operations			
Revenue	2	**5,011**	**5,150**
Change in inventories of finished goods and intermediate products		-139	150
Other operating income		15	13
Purchased equipment for contract work		-578	-736
Raw materials and consumables used		-1,162	-1,242
Other external expenses		-756	-727
Gross profit		**2,391**	**2,608**
Staff expenses	3	-1,539	-1,537
EBITDA		**852**	**1,071**
Depreciation, amortization and impairment losses	4	-257	-260
EBIT		**595**	**811**
Result of investment in joint venture	5	-30	-15
Financial income	6	73	78
Financial expenses	7	-109	-87
Profit before tax		**529**	**787**
Tax	8	-126	-242
Profit from continuing operations		**403**	**545**
Loss from discontinuing operations	38	-422	-53
Net profit		**-19**	**492**
Profit attributable to:			
Owners of the parent company		-19	537
Non-controlling interest		0	-45
Net profit		**-19**	**492**

Consolidated statement of comprehensive income

DKK million		**2017**	**2016**
Net profit		**-19**	**492**
Foreign currency translation adjustment		-175	34
Recycling currency translation adjustments from discontinuing operations	38	24	0
Derivative financial instruments used for hedging of future cash flows		12	0
Realized derivative financial instruments transferred to financial income/expense		1	2
Tax on this		-3	-1
Fair value adjustment of financial assets available-for-sale		-26	-48
Tax on this		-4	0
Tax adjustment on revaluation of land and buildings		17	0
Items that may be reclassified to the income statement		**-154**	**-13**
Actuarial adjustments on pension obligations		13	15
Tax on this		-5	-6
Items that may not be reclassified to the income statement		**8**	**9**
Other comprehensive income		**-146**	**-4**
Total comprehensive income		**-165**	**488**
Attributable to:			
Owners of the parent company		-165	535
Non-controlling interests		0	-47
Total comprehensive income		**-165**	**488**
Continuing operations		257	588
Discontinuing operations		-422	-53
Total comprehensive income attributed to the owners of the parent company		**-165**	**535**

Consolidated balance sheet

Assets		December 31	December 31
DKK million	**Note**	**2017**	**2016**
Rights		19	22
Patents		45	42
Software		20	39
Intangible assets under construction		0	3
Intangible assets	9	**84**	**106**
Land and buildings		759	978
Plant and machinery		791	1,400
Other fixtures and equipment		241	257
Property, plant and equipment under construction		250	317
Property, plant and equipment	10	**2,041**	**2,952**
Investment in joint venture		0	14
Other securities and investments		316	348
Other receivables		54	51
Investments	11	**370**	**413**
Non-current assets		**2,495**	**3,471**
Inventories	12	**1,043**	**1,362**
Trade receivables	13	995	865
Contract work in progress	14	173	154
Receivables from the parent company	15	371	535
Other receivables	16	215	178
Prepayments		35	40
Receivables		**1,789**	**1,772**
Cash		**862**	**556**
Current assets		**3,694**	**3,690**
Assets		**6,189**	**7,161**

Consolidated balance sheet

Equity and liabilities		December 31	December 31
DKK million	**Note**	**2017**	**2016**
Share capital	17	376	376
Revaluation reserve	18	198	181
Foreign currency translation reserve	18	20	171
Reserve for unpaid share capital	18	241	241
Reserve for value adjustment of hedging instruments	18	6	-4
Reserve for value adjustment of financial assets available-for-sale	18	177	207
Retained earnings		646	1,066
Equity attributed to the owners of the parent company		**1,664**	**2,238**
Non-controlling interest		0	51
Total equity		**1,664**	**2,289**
Pension obligations and similar obligations	20	30	74
Deferred tax	21	522	514
Provisions	22	255	203
Bonds	23	499	997
Mortgage debt	23	30	33
Credit institutions	23	575	686
Leasing obligations	23	130	130
Deferred income	23	0	11
Other payables	24	3	4
Non-current liabilities		**2,044**	**2,652**
Bonds	23	499	0
Mortgage debt	23	3	3
Credit institutions	23	110	132
Deferred income	23	1	1
Prepayments from customers	25	229	280
Contract work in progress	14	675	732
Trade payables		382	486
Corporate income tax		78	63
Other payables	24	504	523
Current liabilities		**2,481**	**2,220**
Liabilities		**4,525**	**4,872**
Equity and liabilities		**6,189**	**7,161**

Consolidated statement of changes in equity

DKK million	Share capital	Reserves	Retained earnings	Total	Non-controlling interest	Total equity
Equity at January 1, 2017	**376**	**796**	**1,066**	**2,238**	**51**	**2,289**
Adjustment of non-controlling interest	0	0	-75	-75	-51	-126
Adjusted equity at January 1, 2017	**376**	**796**	**991**	**2,163**	**0**	**2,163**
Net profit	0	0	-19	-19	0	-19
Other comprehensive income	0	-154	8	-146	0	-146
Comprehensive income	**0**	**-154**	**-11**	**-165**	**0**	**-165**
Dividend	0	0	-334	-334	0	-334
Transactions with owners	**0**	**0**	**-334**	**-334**	**0**	**-334**
Equity at December 31, 2017	**376**	**642**	**646**	**1,664**	**0**	**1,664**

DKK million	Share capital	Reserves	Retained earnings	Total	Non-controlling interest	Total equity
Equity at January 1, 2016	**376**	**854**	**773**	**2,003**	**71**	**2,074**
Net profit	0	0	537	537	-45	492
Other comprehensive income	0	-58	56	-2	-2	-4
Comprehensive income	**0**	**-58**	**593**	**535**	**-47**	**488**
Dividend	0	0	-300	-300	0	-300
Capital increase in subsidiaries	0	0	0	0	27	27
Transactions with owners	**0**	**0**	**-300**	**-300**	**27**	**-273**
Equity at December 31, 2016	**376**	**796**	**1,066**	**2,238**	**51**	**2,289**

Consolidated cash flow statement

DKK million	Note	2017	2016
Net profit		-19	492
Adjustments for non-cash items	34	428	553
Change in working capital	35	-100	-150
Cash flows from operating activities before financial items and tax		**309**	**895**
Interest received, etc.		55	67
Interest paid, etc.		-126	-105
Cash flows from ordinary activities		**238**	**857**
Corporation tax paid		-101	-109
Cash flows from operating activities		**137**	**748**
- Of which continuing operations		421	785
Purchase of intangible assets		-31	-23
Purchase of property, plant and equipment		-211	-393
Sale of property, plant and equipment		0	11
Purchase of non-current financial assets		-42	-16
Sale of fixed asset investments		31	9
Sale of emissions control business areas		919	0
Dividend received		24	26
Cash flows from investing activities		**690**	**-386**
Raising of long-term loans		0	387
Repayment of long-term loans		-126	-644
Non-controlling interest's payment of share capital		-126	27
Dividend paid		-334	-300
Cash flows from financing activities		**-586**	**-530**
Change in cash and cash equivalents		**241**	**-168**
Cash and cash equivalents at January 1		790	952
Foreign currency translation adjustments		-40	6
Cash and cash equivalents at December 31		**991**	**790**
Cash		862	556
Deposits with the parent company		129	234
Cash and cash equivalents at December 31		**991**	**790**

Notes to the consolidated financial statements

List of notes

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements

Basis of preparation

The consolidated financial statements of Haldor Topsoe A/S have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, as well as additional Danish disclosure requirements applying to large enterprises of reporting class C.

The accounting policies are unchanged from last year.

New standards, amendments and interpretations adopted by Topsoe
The following standards have been implemented by Topsoe for the financial year 2017:

> IAS 7 "Statement of cash flows": Additional disclosures on reconciliation of financial liabilities required. Interest-bearing debt to be reconciled from beginning to end of period.
> IAS 12 "Income taxes": Clarifies when a difference is considered a temporary difference in respect of tax assets related to financial assets that are measured at fair value. When an enterprise has acquired a receivable which is treated as available for sale and, consequently, is measured at fair value through other comprehensive income, a subsequent decline in the fair value of the receivable will result in a temporary difference between the carrying amount and the tax base, on which deferred tax is to be calculated.

Topsoe has assessed that the new standards, amendments and interpretations effective for financial years beginning on or after January 1, 2017 do not have a significant impact on the consolidated financial statements of Topsoe.

New standards, amendments and interpretations not yet effective
The following new standards, amendments and interpretations have been adopted by the IASB and adopted by the EU. Topsoe will adopt the standards when they become effective:

> IFRS 9 "Financial instruments": The standard introduces an expected loss model for impairment losses on loans and receivables. As an overriding main rule, this new model will imply larger impairment losses than those incurred under IAS 39. The number of classification categories for financial assets is reduced to three: amortized cost, fair value through profit or loss and fair value through other comprehensive income. Fair value changes to financial liabilities which are attributable to the fair value and which arise from changes in own credit risks must be recognized in other comprehensive income. Simplified rules on hedge accounting are introduced. The standard will be effective for financial years beginning on or after January 1, 2018.

Topsoe has assessed that the standard will not have a significant impact on the consolidated financial statements. However, implementation of the standard will impact disclosures.

> IFRS 15 "Revenue from contracts with customers": A new standard on revenue recognition that replaces IAS 11 and IAS 18 among others. The standard may potentially affect revenue recognition in a number of areas, including:
> The timing of revenue recognition
> Recognition of variable consideration
> Allocation of revenue from multi-element arrangements
> Recognition of revenue from license rights
> Incremental costs of obtaining the contract

The standard also includes a large number of new disclosure requirements.

IFRS 15 "Revenue from contracts with customers": Clarifications of IFRS 15 concerning the identification of performance obligations, principal versus agent considerations and license considerations as well as changes to the transition rules.

IFRS 15 and the clarifications will be effective for financial years beginning on or after January 1, 2018.

Topsoe has analyzed contracts and assessed that the standard will not have a significant impact on the consolidated financial statements. However, items currently recognized in the balance sheet will be separately recognized as contract assets and liabilities. Furthermore, the implementation of the standard will impact disclosures.

> IFRS 16 "Leases": Going forward, the lessee is required to recognize all leases as a lease liability and a lease asset in the balance sheet with two exceptions: short-term leases (less than 12 months) and leases relating to low-value assets. It must furthermore be considered whether the agreement is a lease or a service arrangement.

The current rules remain largely unchanged for the lessor. Consequently, leases are still to be classified as finance leases and operating leases.

The standard will be effective for financial years beginning on or after January 1, 2019.

Topsoe has started analyzing the Group's current contracts containing a lease to assess the impact of implementing IFRS 16. However, the full impact is not yet known. Based on the ongoing analyses, the new standard is expected to result in an increase in total assets of approx. 6-8%. Consequently, the related key ratios in the consolidated financial statements, such as EBITDA and ROIC, will be impacted. The lease asset and lease liability are to be presented separately in the balance sheet or disclosed in the notes. Furthermore, the implementation of IFRS 16 will impact disclosures.

The IASB has issued the following new standards, amendments and new interpretations that are relevant to Topsoe, but which have not yet been adopted by the EU:

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements (continued)

- IFRS 9 “Financial instruments”: A minor amendment concerning the classification of receivables in situations where a borrower has a prepayment option and where such a prepayment has negative consequences for the borrower. They are to be measured at amortized cost or fair value with adjustments through other comprehensive income if certain criteria are met. The amendment will be effective for financial years beginning on or after January 1, 2019.
- IFRIC 22 “Foreign currency transactions and advance consideration”: IAS 21 requires an enterprise to use the exchange rate at the date of the transaction which is defined as the date on which the transaction first qualifies for recognition. The amendment will be effective for financial years beginning on or after January 1, 2018.
- IFRIC 23 “Uncertainty over income tax treatments”: The interpretation clarifies that it must be determined whether each tax position is to be treated individually or collectively with other uncertain tax positions. The assessment should be based on the assumption that the tax authorities have the same knowledge of the enterprise’s circumstances and, therefore, the assessment should disregard any detection risk. This determination may be based on e.g. how tax statements are prepared, or how the enterprise expects the tax authorities to treat the uncertain tax positions. The uncertain tax position must be recognized if it is probable that the enterprise will have to pay or receive refunds. The uncertain tax position must be measured so as to better reflect the receivable/liability and the related uncertainty. The amendment will be effective for financial years beginning on or after January 1, 2019.
- Annual improvements (2015-2017): Include three minor clarifications:
  - IAS 12:” Income taxes”: Income tax consequences of dividends should be recognized in profit or loss, see IAS 12.
  - IAS 23 ”Borrowing costs”: Borrowing costs incurred on specific-purpose borrowing may subsequently change into borrowing costs on general borrowing, see IAS 23.
  - IFRS 3 “Business combinations”: Clarifies that a step acquisition of a joint venture by which an enterprise obtains control must be treated in accordance with IFRS 3.

  The amendments will be effective for financial years beginning on or after January 1, 2019.

The above standards and interpretations will be applied when they become effective. None of these are expected to have a significant impact on the consolidated financial statements of Topsoe.

General

The consolidated financial statements have been prepared in accordance with the historical cost convention, except for the following items that are stated at fair value:

- Land and buildings
- Financial assets available-for-sale
- Derivative financial instruments

Part of the information required by IFRS appears from Management’s Review. The remaining information appears from the following sections.

Consolidation
The consolidated financial statements comprise the parent company, Haldor Topsoe A/S, and enterprises in which the parent company directly or indirectly holds the majority of the voting rights or in which the parent company through share ownership or otherwise exercises control.

Consolidation is performed by summarizing the financial statements of the parent company and group enterprises, which have been prepared in accordance with the Group’s accounting policies.

On consolidation, elimination is made of intercompany income and expenses, shareholdings, dividends and accounts as well as of realized and unrealized profits and losses on transactions between the consolidated enterprises.

The parent company’s investments in consolidated group enterprises are set off against the parent company’s share of the net asset value of group enterprises at the time of consolidation.

The non-controlling interest’s share of profit for the year and of equity in subsidiaries which are not wholly owned is included as part of the Group’s profit and equity, respectively, but shown as separate items.

Functional and presentation currency
Items in the financial statements of each of the Group’s enterprises are presented in the currency used in the primary economic environment in which the enterprise operates. The consolidated financial statements are presented in Danish kroner (DKK), which is the functional and presentation currency of the parent company.

Translation policies
Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the date of transaction. Foreign currency monetary items are translated into the functional currency at the exchange rates prevailing at the balance sheet date.

Financial statements of group enterprises with another functional currency than Danish kroner are translated into Danish kroner using the exchange rates prevailing at the balance sheet date for balance sheet items and average exchange rates for income statement items.

Realized and unrealized foreign exchange gains and losses are recognized in financial income and financial expenses, except for unrealized losses and gains arising from hedging of future cash flows, which are recognized in equity under reserve for value adjustment of hedging instruments. In addition, the following currency translation differences are recognized directly in equity under the foreign currency translation reserve, using the exchange rates prevailing at the balance sheet date:

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements (continued)

> Translation of group enterprises' net assets at the beginning of the financial year.
> Translation of group enterprises' income statements from average exchange rates to the exchange rates prevailing at the balance sheet date.
> Translation of non-current intercompany balances that are considered an addition to the net investment in group enterprises.

Derivative financial instruments
Derivative financial instruments are initially recognized in the balance sheet at cost and are subsequently remeasured at their fair values. Positive and negative fair values of derivative financial instruments are recognized in "Other receivables" and "Other payables".

Changes in the fair values of derivative financial instruments that qualify as hedges of expected future cash flow are recognized directly in equity. Amounts recognized in equity are transferred to the income statement in the period when the hedged item affects the income statement.

Changes in the fair values of derivative financial instruments that do not qualify as hedges are recognized in the income statement. The fair values of derivative financial instruments are determined based on prices obtained from stock exchanges or other reliable data sources.

Non-current assets (or disposal groups) held for sale and discontinuing operations
Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as deferred tax assets, assets arising from employee benefits and financial assets that are carried at fair value, which are specifically exempt from this requirement.

An impairment loss is recognized for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognized for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognized. A gain or loss not previously recognized by the date of the sale of the non-current asset (or disposal group) is recognized at the date of derecognition.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortized while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognized.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

A discontinuing operation is a component of the entity that has been disposed of or is classified as held for sale and that represents a separate major line of business or geographical area of operations or is part of a single co-ordinated plan to dispose of such a line of business or area of operations. The results of discontinuing operations are presented separately in the income statement.

Income statement

Revenue
Revenue from the sale of finished goods is recognized in the income statement when delivery and transfer of risk have been made before year-end and when the income can be measured reliably and is expected to be received. Revenue is recognized exclusive of VAT and net of discounts relating to sales.

Contract work in progress is recognized based on the stage of completion, which means that revenue equals the selling price of the work completed for the year (percentage-of-completion method). This method is applied when total revenue and expenses in respect of the contract and the stage of completion at the balance sheet date can be measured reliably, and it is probable that economic benefits, including payments, will flow to the Group.

Other operating income
Other operating income comprises income of a secondary nature to the Group's core activities, including government grants provided for research projects.

Purchased equipment for contract work
Purchased equipment for contract work comprises hardware etc. related to engineering projects.

Raw materials and consumables used
Raw materials and consumables used comprise raw materials and consumables consumed to achieve revenue for the year.

Other external expenses
Other external expenses comprise expenses for premises, sales and distribution as well as office expenses, etc.

Government grants
Government grants received for research and development projects are recognized in "Other operating income" as the projects progress. Grants received for investment in property, plant and equipment are set off against the related property, plant and equipment, if directly related. Otherwise grants are recognized as deferred income and systematically recognized in "Other external expenses" over the useful life of the asset.

Leases
Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the income statement on a straight-line basis over the lease term. The liability related to non-cancellable leases is disclosed in the notes.

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements (continued)

Leases where the Group has substantially all the risks and rewards of ownership are classified as financial leases. Financial leases are capitalized at the lease's commencement at the lower of the fair value of the leased property and the present value of the minimum lease payments. The property acquired under finance leases is depreciated over the shorter of the useful life or the asset and the lease term. The corresponding lease obligation is included in liabilities.

Tax
Tax consists of current tax for the year, deferred tax as well as any adjustments to prior years. Tax attributable to the profit for the year is recognized in the income statement, whereas tax attributable to equity transactions is recognized directly in equity.

Haldor Topsoe A/S and Danish group enterprises are jointly taxed. Tax for the individual companies is allocated fully on the basis of expected taxable income.

Balance sheet

Intangible assets
Development projects
Development projects that are clearly defined and identifiable and in respect of which technical feasibility, sufficient resources and a potential future market or development opportunity in the enterprise can be demonstrated, and where it is the intention to manufacture, market or use the project, are recognized as intangible assets. This applies if sufficient certainty exists that the value in use of future earnings can cover the cost of sales and distribution involved as well as the development costs.

Development projects that do not meet the Group's criteria for recognition in the balance sheet and research expenses are recognized as expenses in the income statement as incurred.

Other intangible assets
Rights and patents are measured at cost less accumulated amortization and impairment losses. Both rights and patents are amortized on a straight-line basis over the remaining patent term, but not exceeding 10 years, due to the notoriously fast development in applied technologies and related uncertainty about longer amortization period.

Internally developed software for major projects is measured at cost less accumulated amortization and impairment losses. Software is amortized on a straight-line basis over 4 years.

Other intangible assets are tested for impairment when there is an indication of impairment. Material impairment indicators which may lead to an impairment test are similar to those stated in the section on property, plant and equipment.

Impairment losses relating to other intangible assets are reversed if the recoverable amount subsequently increases.

Gains or losses from divestment of intangible assets are recognized in the income statement under “Other external expenses”.

Property, plant and equipment
Plant and machinery and other fixtures and equipment are measured at cost less accumulated depreciation and impairment losses. Land and buildings are measured using the revaluation model at cost with the addition of revaluations less accumulated depreciation and impairment losses. Property, plant and equipment under construction are measured at cost.

Cost comprises the cost of acquisition and expenses directly related to the acquisition up until the time when the asset is ready for use as well as costs of restoration to the extent that a provision is recognized at the same time.

In the case of assets of own construction, cost comprises direct and indirect expenses for labor, materials, components and sub-suppliers. Borrowing costs related to construction of major property, plant and equipment are recognized in cost over the period of construction.

Revaluations of land and buildings are performed on the basis of Management's estimate of fair value which is based on an independent valuation. Revaluations less depreciation and deferred taxes are transferred to the revaluation reserve under equity.

Property, plant and equipment are divided into sub-assets if the future useful life of the individual assets is different.

Depreciation based on cost and revaluations reduced by any residual value is calculated on a straight-line basis over the expected useful lives of the assets, which are:

Buildings	13–40 years
Plant and machinery	5–10 years
Other fixtures and equipment	4–20 years

Land is not depreciated.

The residual value and useful lives of the assets are assessed annually and adjusted if necessary at the balance sheet date.

Property, plant and equipment are tested for impairment when there is an indication of impairment. Impairment indicators comprise e.g.:

> Reduced earnings compared to expected future results.
> Material negative development trends in the sector or the economy in the enterprise's markets.
> Damage to the asset or changed use of the asset.

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements (continued)

Impairment losses relating to property, plant and equipment are reversed if the recoverable amount subsequently increases.

Gains and losses from sale of property, plant and equipment are recognized in the income statement under “Other external expenses”.

Investment in joint venture

Investment in joint venture is recognized and measured under the equity method.

The item “Result of investment in joint ventures” in the income statement includes the proportionate share of the result after tax.

Other securities and investments

Investments are measured at fair value at the balance sheet date.

Unrealized fair value adjustments are recognized directly in equity under the “Reserve for value adjustment of financial assets” available-for-sale. On realization, value adjustments are transferred from equity to the income statement. Impairment losses are recognized in the income statement.

Securities in the form of loans are measured in the balance sheet at the lower of amortized cost and net realizable value, which corresponds to nominal value less provision for bad and doubtful debts.

Inventories

Inventories are measured at cost under the FIFO method. Cost is determined using a standard cost method that includes direct and indirect production costs. Direct production costs comprise raw materials, consumables and direct labor costs, whereas indirect production costs comprise indirect materials and labor costs, maintenance and depreciation of machinery, production buildings and equipment used in the production process as well as the cost of plant administration and management.

Please see the section "Key accounting estimates and judgements" for information about write-downs.

Receivables

Receivables are measured in the balance sheet at the lower of amortized cost and net realizable value, which corresponds to nominal value less provisions for bad debts. Provisions for bad debts are determined on the basis of an individual assessment of each receivable.

Contract work in progress

Contract work in progress is measured at the selling price of the work completed calculated on the basis of the stage of completion. The stage of completion is determined on the basis of the share of contract costs incurred compared to the total expected contract costs. Where it is probable that total contract expenses will exceed the total revenue from a contract, the expected loss is recognized as an expense in the income statement.

Where the selling price cannot be measured reliably, the selling price is measured at the lower of expenses incurred and net realizable value.

Prepayments are set off against contract work in progress. Received payments on account exceeding the performed share of contracts are determined separately for each contract and recognized in “Contract work in progress” under current liabilities.

Expenses relating to sales work and the winning of contracts are recognized in the income statement as incurred.

Reserves

The revaluation reserve includes a reserve for revaluation of land and buildings after depreciation and deferred tax.

The foreign currency translation reserve comprises all translation adjustments arising from the translation of financial statements of group enterprises with another functional currency than Danish kroner as well as translation adjustments concerning non-current intercompany balances that are considered an addition to the net investment in such enterprises.

Reserve for unpaid share capital comprises the deviation between the amount by which the share capital has been increased and the amount paid.

Reserve for value adjustment of hedging instruments comprises the accumulated net change in the fair value of hedging transactions which meet the criteria of future cash flow hedges and where the hedged transaction has not yet been completed.

Reserve for value adjustment of financial assets available-for-sale comprises the accumulated net change in the fair value of financial assets classified as financial assets available-for-sale. The reserve is dissolved as the financial assets in question have been sold.

Dividend

Proposed dividend for the financial year is recognized in “Retained earnings”.

Pension obligations and similar obligations

The costs of defined contribution plans are recognized in the income statement in the financial year to which they relate.

The costs and liabilities of defined benefit plans are determined in accordance with the projected unit credit method. The liability is calculated annually by an actuary. Actuarial gains and losses are recognized in full in "Other comprehensive income". Plan assets are only recognized to the extent that the Group is able to derive future economic benefits such as refunds from the plan or reductions of future contributions.

Costs related to other non-current staff benefits are accrued over the employees’ expected average working life.

Deferred tax

Deferred income tax is measured using the balance sheet liability method in

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements (continued)

respect of temporary differences arising between the tax bases of assets and liabilities. The tax base of tax loss carry-forwards is deducted from deferred tax when it is probable that the losses may be utilized. Deferred tax is measured on the basis of the tax rules and tax rates expected to be in force on elimination of temporary differences. Any changes in deferred tax due to changes in tax rates are recognized in the income statement with the share attributable to the results for the year and directly in equity with the share attributable to equity transactions.

Provisions
Provisions are recognized when – in consequence of a previous event – the Group has a legal or constructive obligation and it is probable that economic benefits must be given up to settle the obligation. Provisions are measured at Management's estimate of the discounted amount expected to be required to repay the obligation.

Financial liabilities
Loans such as bonds, mortgage loans and loans from credit institutions which are expected to be held to maturity are recognized initially at the proceeds received net of transaction expenses incurred. Subsequently, the loans are measured at amortized cost, corresponding to capitalized value, using the effective interest rate; the difference between the proceeds and the nominal value is recognized in the income statement over the loan period. Other debts are measured at amortized cost, mainly corresponding to nominal value.

Deferred income
Deferred income comprises payments received in respect of income in subsequent years and is primarily related to government grants.

Other areas

Cash flow statement
The Group's cash flow statement, which is prepared according to the indirect method, shows the Group's cash flows for the year broken down by operating, investing and financing activities as well as the Group's cash and cash equivalents at the beginning and end of the year.

The Group's cash comprises the Group's cash and cash equivalents and cash deposits with Haldor Topsøe Holding A/S.

Financial highlights
The financial ratios have been prepared in accordance with the Danish Society of Financial Analysts' "Recommendations and Financial Ratios 2015".

The key figures and financial ratios have been calculated as follows:

Gross margin = $\dfrac{\text{Gross profit x 100}}{\text{Revenue}}$

EBITDA margin = $\dfrac{\text{EBIT + depreciation, amortization etc. x 100}}{\text{Revenue}}$

EBIT margin = $\dfrac{\text{EBIT x 100}}{\text{Revenue}}$

Return on invested capital = $\dfrac{\text{EBIT x 100}}{\text{Average invested capital}}$

Equity ratio = $\dfrac{\text{Equity at year-end x 100}}{\text{Total assets}}$

Return on equity = $\dfrac{\text{Net profit x 100}}{\text{Average equity}}$

Notes to the consolidated financial statements

Note 1
Accounting policies, key accounting estimates and judgements (continued)

Key accounting estimates and judgements

In accordance with general accounting policies, determination of the carrying amount of certain assets and liabilities requires assessments and estimates of future events. Assessments and estimates are performed based on historical experience and other factors which Management considers reasonable under the circumstances. These assumptions may be incomplete or inaccurate and unexpected issues may arise, which implies that the assessments and estimates made are subject to some uncertainty. Special risks for the Group appears from the section "Risk management".

Land and buildings

The Group's land and buildings are measured in accordance with the revaluation model. Fair value is determined on the basis of a market based estimate performed by an independent, qualified valuation expert. The frequency of an independent valuation depends on the extent to which management assesses that the market development shows signs of significant difference between the carrying amount and fair value.

Other investments

Other investments are measured at fair value at the balance sheet date. To the extent that fair value cannot be derived from an active market, it is required that management assesses and selects an appropriate method for determination of the fair value. In this case, the fair value is measured at the discounted value of expected future cash flows. Material assumptions comprise expected future cash flows, discount rates and growth rates for the period.

Inventory

The standard cost calculations are reviewed on a regular basis to ensure that all relevant assumptions such as prices, output and capacity utilization are incorporated correctly. Changes in the calculation method used to calculate indirect production costs may impact the gross margin and the overall measurement of inventories.

Inventories are written down to net realizable value if this is lower than cost. The need to write down inventories is primarily assessed based on negotiability and production quality. The net realizable value is calculated as the total of future revenue expected to be generated in the process of normal operations and determined by allowing for marketability, obsolescence and development in expected selling price less selling expenses.

Revenue from engineering projects

In Management's opinion, the Group's sale of engineering projects is to a high degree individually adjusted, and contract work in progress is consequently measured at the selling price of the work completed based on the stage of completion. The stage of completion is determined on the basis of the share of contract costs incurred compared to the total expected contract costs. These costs are partly based on an estimate which to a high degree is based on historical experience. Expected income and costs of engineering projects may be adjusted along with the finalization of the projects and clarifications of uncertainties. Parallel changes to the engineering contract may occur and certain assumptions in the contract may not be met.

Warranty provision for engineering projects

The evaluation of the warranty provision for engineering projects is based on historical levels. Furthermore, the warranty provision also reflects the risks associated with bringing new technologies to the market as well as executing projects in countries with higher geopolitical risks.

Contingent liabilities and lawsuits

As part of the Group's business, Topsoe may become party to a lawsuit and/or dispute. In these cases, the potential liabilities and their likelihood are evaluated. The evaluation is based on available information and legal assessment from advisors. Assessing the final outcome of lawsuits/disputes is difficult and the outcome may thus deviate from the evaluation made by Topsoe.

Research and development costs

Research costs are expensed when incurred. Development costs which do not meet the requirements of capitalization are expensed when incurred. Management assesses whether the capitalization requirements are met based on expectations of the technical possibility of completing the development project, expectations of the existence of a market for the product, etc.

Notes to the consolidated financial statements

Note 2
Revenue
The Group's activities are in the business segment of providing catalytic processes for integrated solutions to industrial plants. The provision of these integrated solutions comprises fundamental and applied research, reaction engineering, process engineering, mechanical design and production and supply of catalysts. The Group's revenue can be specified as follows:

DKK million	**2017**	**2016**
Sale of products	4,435	4,510
Sale of services	576	640
Total revenue	**5,011**	**5,150**

Of the total revenue, 32% (2016: 39%) derives from engineering projects.

Government grants for research and development amounting to DKK 8 million (2016: DKK 11 million) have been recognized in the income statement under "Other operating income".

Note 3
Staff expenses

DKK million	**2017**	**2016**
Wages and salaries	1,281	1,299
Pensions – defined contribution plans	137	126
Pensions – defined benefit plans	8	11
Other social security contributions	135	135
Total	**1,561**	**1,571**
Capitalization of work performed on property, plant and equipment	-22	-34
Total staff expenses	**1,539**	**1,537**
Executive Committee salary	22	23
Executive Committee pension	4	3
Executive Committee severance pay	0	3
Fee to Board of Directors	7	5
Total remuneration to Executive Committee and Board of Directors	**33**	**34**
Average number of employees	2,527	2,543
Of which in Denmark	1,737	1,803

Notes to the consolidated financial statements

Note 4
Depreciation, amortization and impairment losses

DKK million	**2017**	**2016**
Rights	3	2
Patents	8	8
Software	14	16
Land and buildings	18	17
Plant and machinery	135	132
Other fixtures and equipment	79	85
Total depreciation, amortization and impairment losses	**257**	**260**

Note 5
Result of investment in joint venture

DKK million	**2017**	**2016**
Share of result of joint venture	-30	-15
Total result of investment in joint venture	**-30**	**-15**

Note 6
Financial income

DKK million	**2017**	**2016**
Dividend from other investments	24	26
Interest received from the parent company	2	6
Interest income	6	6
Foreign currency translation adjustment	40	39
Other financial income	1	1
Total financial income	**73**	**78**

Note 7
Financial expenses

DKK million	**2017**	**2016**
Interest expenses	50	47
Loss on derivative financial instruments (interest)	1	2
Foreign currency translation adjustment	58	38
Total financial expenses	**109**	**87**

Notes to the consolidated financial statements

Note 8
Tax

DKK million	**2017**	**2016**
Current tax for the year	153	137
Change in deferred tax for the year	40	63
Change in corporate tax rate	-22	0
Adjustments to prior years	-3	11
Total tax	**168**	**211**
Tax on continuing operations	126	242
Tax on discontinuing operations	42	-31
Total tax	**168**	**211**

%	**2017**	**2016**
Danish corporate tax rate	22.0	22.0
Non-deductible expenses	1.4	0.6
Income not subject to tax	-1.0	-0.6
Differences in foreign tax rates	5.4	6.0
Adjustments relating to prior years	-0.2	1.2
Change in corporate tax rate	-3.8	1.5
Effective tax rate	**23.8**	**30.7**

Notes to the consolidated financial statements

Note 9
Intangible assets

DKK million	**Rights**	**Patents**	**Software**	**Intangible assets under construction**
Cost at January 1, 2017	25	110	180	3
Foreign currency translation adjustment	0	0	-1	0
Additions during the year	2	18	6	5
Disposals during the year	-2	-13	-24	0
Transfers during the year	0	0	8	-8
Cost at December 31, 2017	**25**	**115**	**169**	**0**
Amortization and impairment losses at January 1, 2017	3	68	141	0
Amortization for the year	3	8	18	0
Reversal of amortization and impairment losses on assets sold	0	-6	-10	0
Amortization and impairment losses at December 31, 2017	**6**	**70**	**149**	**0**
Carrying amount at December 31, 2017	**19**	**45**	**20**	**0**
Research and development costs expensed in 2017				470

DKK million	**Rights**	**Patents**	**Software**	**Intangible assets under construction**
Cost at January 1, 2016	25	104	171	2
Additions during the year	0	13	7	3
Disposals during the year	0	-7	0	0
Transfers during the year	0	0	2	-2
Cost at December 31, 2016	**25**	**110**	**180**	**3**
Amortization and impairment losses at January 1, 2016	1	64	122	0
Amortization for the year	2	8	19	0
Reversal of amortization and impairment losses on assets sold and scrapped	0	-4	0	0
Amortization and impairment losses at December 31, 2016	**3**	**68**	**141**	**0**
Carrying amount at December 31, 2016	**22**	**42**	**39**	**3**
Research and development costs expensed in 2016				495

Notes to the consolidated financial statements

Note 10
Property, plant and equipment

DKK million	Land and buildings	Plant and machinery	Other fixtures and equipment	Property, plant and equipment under construction
Cost at January 1, 2017	1,280	3,547	1,019	317
Foreign currency translation adjustment	-31	-148	-8	-14
Additions during the year	2	48	66	95
Disposals during the year	-244	-1,267	-124	-6
Transfers during the year	0	97	45	-142
Cost at December 31, 2017	**1,007**	**2,277**	**998**	**250**
Revaluation at January 1, 2017	344	8	0	0
Foreign currency translation adjustment	-18	0	0	0
Revaluation at December 31, 2017	**326**	**8**	**0**	**0**
Depreciation and impairment losses at January 1, 2017	646	2,155	762	0
Foreign currency translation adjustment	-14	-87	-7	0
Depreciation for the year	26	186	95	0
Reversal of depreciation and impairment losses on assets sold and scrapped	-84	-760	-93	0
Depreciation and impairment losses at December 31, 2017	**574**	**1,494**	**757**	**0**
Carrying amount at December 31, 2017	**759**	**791**	**241**	**250**
Carrying amount at December 31, 2017, under the depreciated cost model	487	791	241	250
Borrowing costs capitalized in 2017				2

Where Management assesses that a revaluation is material, the properties in question have been revalued by an independent assessor in connection with closing of the accounts, latest in 2017.

Carrying amount of financial leased assets	**125**	**0**	**0**	**0**

Notes to the consolidated financial statements

Note 10
Property, plant and equipment (continued)

DKK million	Land and buildings	Plant and machinery	Other fixtures and equipment	Property, plant and equipment under construction
Cost at January 1, 2016	1,062	3,148	947	540
Foreign currency translation adjustment	3	34	3	-8
Additions during the year	146	125	32	219
Disposals during the year	-15	-70	-3	0
Transfers during the year	84	310	40	-434
Cost at December 31, 2016	**1,280**	**3,547**	**1,019**	**317**
Revaluation at January 1, 2016	339	8	0	0
Foreign currency translation adjustment	5	0	0	0
Revaluation at December 31, 2016	**344**	**8**	**0**	**0**
Depreciation and impairment losses at January 1, 2016	625	2,037	668	0
Foreign currency translation adjustment	4	24	0	0
Depreciation for the year	22	159	97	0
Reversal of depreciation and impairment losses on assets sold and scrapped	-5	-65	-3	0
Depreciation and impairment losses at December 31, 2016	**646**	**2,155**	**762**	**0**
Carrying amount at December 31, 2016	**978**	**1,400**	**257**	**317**
Carrying amount at December 31, 2016, under the depreciated cost model	687	1,400	257	317
Borrowing costs capitalized in 2016				4
Carrying amount of financial leased assets	**129**	**0**	**0**	**0**

Notes to the consolidated financial statements

Note 10
Property, plant and equipment (continued)

DKK million	Level 1	Level 2	Level 3
Office buildings in Denmark	0	0	231
Production plants in Denmark and US	0	0	336
Excess land in US	0	67	0
Distribution of assets stated at fair value at December 31, 2017	**0**	**67**	**567**

DKK million	Level 1	Level 2	Level 3
Office buildings in Denmark	0	0	232
Production plants in Denmark, US, and China	0	0	541
Excess land in US	0	76	0
Distribution of assets stated at fair value at December 31, 2016	**0**	**76**	**773**

Level 1: Quoted prices (unadjusted) in an active market for identical assets.

Level 2: Input other than quoted prices included within level 1 that is observable for asset, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: Input for assets that are not based on observable market data (i.e. unobservable inputs).

There have been no transfers between levels 1 and 2 during the year.

The fair value of office buildings in Denmark has been derived using a market approach primarily based on rental per m^2 for comparable buildings and an interest rate. The rental per m^2 is set at DKK 700-1,100 for office buildings and DKK 300-700 for storage and laboratories. The fair value of production plants has been derived using a cost approach, which reflects the cost of constructing similar buildings at an equivalent age and use. Excess land in US is valuated using a sales comparison approach. Sales prices of comparable land in close proximity are adjusted for differences in key attributes such as property size. The sales price per acre is set at USD 105,000.

The current use of land and buildings is considered to represent the highest and best use of the assets.

The valuation methods have not changed from last year.

DKK million	2017	2016
Fair value of level 3 assets at January 1	**773**	**703**
Additions	2	100
Disposals	-160	-10
Included in the income statement as depreciation	-22	-21
Foreign currency translation adjustment	-26	1
Fair value of level 3 assets at December 31	**567**	**773**

Notes to the consolidated financial statements

Note 11
Investments

DKK million	**Investment in joint venture**	**Other securities and investments**	**Other receivables**
Cost at January 1, 2017	39	141	68
Foreign currency translation adjustment	0	0	-3
Additions during the year	0	4	41
Disposals during the year	0	-9	-37
Cost at December 31, 2017	**39**	**136**	**69**
Value adjustment at January 1, 2017	-25	207	-17
Net result for the year	-30	0	0
Disposals during the year	0	-2	17
Value adjustments for the year	1	-25	0
Investments with negative equity transferred to receivables	15	0	-15
Value adjustment at December 31, 2017	**-39**	**180**	**-15**
Carrying amount at December 31, 2017	**0**	**316**	**54**

DKK million	**Investment in joint venture**	**Other securities and investments**	**Other receivables**
Cost at January 1, 2016	39	133	72
Additions during the year	0	0	15
Disposals during the year	0	0	-11
Transfers during the year	0	8	-8
Cost at December 31, 2016	**39**	**141**	**68**
Value adjustment at January 1, 2016	-9	255	-17
Net result for the year	-15	0	0
Value adjustments for the year	-1	-48	0
Value adjustment at December 31, 2016	**-25**	**207**	**-17**
Carrying amount at December 31, 2016	**14**	**348**	**51**

Notes to the consolidated financial statements

Note 11
Investments (continued)

Investment in joint venture is specified as follows:

Ferrostaal Topsoe Projects GmbH
The Group has invested in a joint venture together with Ferrostaal GmbH. The share capital of the joint venture is EUR 10 million of which the Group owns 50%. The investment is measured under the equity method. The negative equity has been set off against receivable from the joint venture.

Other securities and investments are specified as follows:

Karnaphuli Fertilizer Limited, Bangladesh (KAFCO)
The Group has a shareholding in KAFCO of nominally BDT 692 million, which equals 15.01% of the shares in KAFCO. The shares are measured at fair value based on a discounted cash flow calculation on the basis of the present budgets and forecasts of KAFCO. The calculation is moreover based on material assumptions in terms of growth rate and discount rate. The discount rate is determined based on Management's estimate of general capital market conditions and the specific risk profile and has been determined at 12% after tax. The growth rate in the terminal period has by Management been estimated at 0%. Both the discount rate and the growth rate correspond to the 2016 rates. Based on these criteria, the KAFCO shares have been written down by DKK 42 million (2016: DKK 50 million).

Chambal Fertilizer and Chemical Ltd., India
The Group has an investment in Chambal Fertilizer and Chemicals Ltd., corresponding to 0.48% of the share capital. The investment is measured at fair value based on listed market value.

Fatima Fertilizer Co. Ltd., Pakistan
The Group has an investment in Fatima Fertilizer Co. Ltd., corresponding to 0.05% of the share capital. The investment is measured at fair value based on listed market value.

Faradion Ltd., United Kingdom
The Group has an investment in Faradion Ltd., corresponding to 22.16% of the share capital. The investment is measured at fair value based on market value.

Fauji Fertilizer Company (FFC), Pakistan
The Group has an investment in FFC corresponding to 0.000195% of the share capital. The investment is measured at fair value based on listed market value.

Note 12
Inventories

DKK million	**2017**	**2016**
Raw materials and consumables	258	367
Work in progress	115	132
Finished goods	670	863
Inventories at December 31	**1,043**	**1,362**
Cost of sales for the year	1,832	1,415
Impairment losses for the year	63	112
Reversed impairment losses for the year	-46	-49

Reversal of impairment losses is attributable to disposal or reuse of impaired goods in the production.

Notes to the consolidated financial statements

Note 13
Trade receivables

DKK million	**2017**	**2016**
Trade receivables, gross	**1,016**	**896**
Provision for bad debts at January 1	-31	-35
Provision for bad debts for the year	-5	-16
Reversal of bad debts, prior years	15	20
Provision for bad debts at December 31	**-21**	**-31**
Trade receivables at December 31	**995**	**865**
Of this, due after more than 1 year	8	2
Realized losses for the year	10	6

Receivables, gross due at December 31 have the following aging in %:	**2017**	**2016**
1-90 days	24	31
91-180 days	12	1
181+ days	13	11

Note 14
Contract work in progress

DKK million	**2017**	**2016**
Selling price of work performed at the balance sheet date	5,581	5,476
Payments received on account	-6,083	-6,054
Contract work in progress at December 31	**-502**	**-578**
Contract work in progress recognized in assets	173	154
Contract work in progress recognized in liabilities	-675	-732
Contract work in progress at December 31	**-502**	**-578**

Notes to the consolidated financial statements

Note 15
Receivables from the parent company

DKK million	**2017**	**2016**
Deposit with the parent company	129	234
Unpaid share capital	241	241
Other receivables	1	60
Receivables from the parent company at December 31	**371**	**535**

Deposit with the parent company is part of a cash pooling arrangement.

Note 16
Other receivables

DKK million	**2017**	**2016**
Receivable regarding VAT and tax	116	119
Fair value of derivative financial instruments	23	19
Government grants	0	1
Other receivables	76	39
Other receivables at December 31	**215**	**178**
Of this, due after more than 1 year	41	0

Note 17
Share capital

Number of shares	**2017**	**2016**
Shares of a nominal value of DKK 376,000,000	**376,000**	**376,000**

The share capital consists of 376,000 shares with a nominal value of DKK 1,000 each. No shares carry any special right.

Notes to the consolidated financial statements

Note 18
Reserves

DKK million	Revaluation reserve	Foreign currency translation reserve	Reserve for unpaid share capital	Reserve for value adjustment of hedging instruments	Reserve for value adjustment of financial assets available-for-sale	Total
Reserves at January 1, 2017	181	171	241	-4	207	796
Foreign currency translation adjustment	0	-175	0	0	0	-175
Recycling currency translation adjustments from discontinuing operations	0	24	0	0	0	24
Derivative financial instruments used for hedging of future cash flows	0	0	0	12	0	12
Realized derivative financial instruments transferred to financial gain/loss	0	0	0	1	0	1
Fair value adjustment of financial assets available-for-sale	0	0	0	0	-26	-26
Tax adjusted on revaluation of land and buildings	17	0	0	0	0	17
Tax	0	0	0	-3	-4	-7
Total reserves at December 31, 2017	**198**	**20**	**241**	**6**	**177**	**642**

DKK million	Revaluation reserve	Foreign currency translation reserve	Reserve for unpaid share capital	Reserve for value adjustment of hedging instruments	Reserve for value adjustment of financial assets available-for-sale	Total
Reserves at January 1, 2016	228	135	241	-5	255	854
Foreign currency translation adjustment	0	36	0	0	0	36
Realized derivative financial instruments transferred to financial gain/loss	0	0	0	2	0	2
Fair value adjustment of financial assets available-for-sale	0	0	0	0	-48	-48
Depreciation on revaluation of buildings	-62	0	0	0	0	-62
Tax	15	0	0	-1	0	14
Reserves attributed to the parent company at December 31, 2016	**181**	**171**	**241**	**-4**	**207**	**796**
Non-controlling interest	0	-2	0	0	0	-2
Total reserves at December 31, 2016	**181**	**169**	**241**	**-4**	**207**	**794**

Notes to the consolidated financial statements

Note 19
Dividend
Proposed dividend constitutes DKK 225 million (2016: DKK 209 million) corresponding to DKK 598.40 (2016: DKK 555.85) per share.

Interim dividend of DKK 125 million for 2017 and dividend of DKK 209 million for 2016 have been paid during the year (2016: DKK 150 million and 150 million) corresponding to DKK 888.30 (2016: DKK 797.87) per share.

Dividend policy
Haldor Topsoe Group is financing the operations of Haldor Topsøe Holding A/S through dividend payments. The liquidity effect of the expected future dividend payments has been incorporated in the cash flow forecasts of Haldor Topsoe Group. .

Note 20
Pension obligations and similar obligations
The Group has entered into pension plans with a considerable number of its employees. Most of the plans are defined contribution plans and only a small part is defined benefit plans.

Defined contribution plans
The Group finances the plans by currently paying a premium to independent insurance companies that are responsible for the pension obligations. Once the pension contributions to the defined contribution plans have been paid, the Group has no further pension obligations to current or terminated employees.

Defined benefit plans
The Group has made agreements with specific groups of employees regarding payment of certain benefits, including pension. These pensions relate to certain employees in the Group's US subsidiary where the plan partly consists of a basic pension and partly of an additional pension for selected members of management. The pension obligations are partly hedged through an independent fund. Actuarial valuation is performed annually.

DKK million	**2017**	**2016**
Pension costs	6	7
Interest expenses	10	12
Interest income on plan assets	-8	-8
Total pension re. defined benefit recognized in staff expenses	**8**	**11**

Applied actuarial assumptions in %	**2017**	**2016**
Discount rate	3.28	3.75
Future pay increases	3.00	3.00

A change in the discount rate of -0.5% or + 0.5%, respectively, would impact the defined benefit obligation by +5% or -4%, respectively. A change in the future pay increase of -0.5% or +0.5, respectively, would impact the defined benefit obligation by -1% or +1%, respectively.

The weighted average duration of the defined benefit obligation is 9.5 years (2016: 9.5 years).

Notes to the consolidated financial statements

Note 20
Pension obligations and similar obligations (continued)

%	2017	2016
US	35	41
International	33	28
Global	4	5
Shares	**72**	**74**
US investment grade	7	6
High yield	9	10
Inflation protected	1	1
Other	1	1
Bonds	**18**	**18**
Real estate	3	3
Commodities	4	5
Other	3	0
Distribution of assets to cover the obligations at December 31	**100**	**100**

DKK million	2017	2016
Present value of pension obligations	288	320
Fair value of pension plan assets	-258	-246
Net obligation at December 31	**30**	**74**
Present value of pension obligations at January 1	320	314
Foreign currency translation adjustment	-36	10
Pension costs	6	7
Interest expenses	10	12
Gain/loss on curtailments	-12	0
Actuarial gains and losses, demographic assumption	-4	-1
Actuarial gains and losses, financial assumption	25	-4
Pension paid	-21	-18
Present value of pension obligations at December 31	**288**	**320**
Fair value of pension plan assets at January 1	246	224
Foreign currency translation adjustment	-30	8
Interest on pension assets	8	8
Return on plan assets excl. interest on pension assets	33	13
Paid by the company	22	11
Pension paid	-21	-18
Fair value of pension plan assets at December 31	**258**	**246**

Expected defined benefit pension payments by the Group in 2018 amount to DKK 21 million.

Notes to the consolidated financial statements

Note 21
Deferred tax

DKK million	**2017**	**2016**
Deferred tax at January 1	514	447
Foreign currency translation adjustment	-3	1
Tax on equity items	-1	6
Tax for the year	-3	67
Tax previous years	15	-7
Deferred tax at December 31	**522**	**514**
Intangible assets and property, plant and equipment	138	200
Inventories	15	17
Work in progress	386	360
Provisions	-27	-59
Other	10	-4
Deferred tax at December 31	**522**	**514**
Of this, due after more than 1 year	369	370

Note 22
Provisions

DKK million	**2017**	**2016**
Provisions at January 1	203	206
Reversals during the year	-7	-14
Provisions for the year	59	11
Provisions at December 31	**255**	**203**
Warranty provision for catalysts and engineering projects	205	198
Waste disposal	1	1
Other provisions	49	4
Provisions at December 31	**255**	**203**
Of this, due after more than 1 year	255	203

Notes to the consolidated financial statements

Note 23
Non-current liabilities

DKK million	**2017**	**2016**
Bonds		
After 5 years	0	0
Between 1 and 5 years	499	997
More than 1 year	**499**	**997**
Less than 1 year	499	0
Bonds at December 31	**998**	**997**
Mortgage debt		
After 5 years	18	21
Between 1 and 5 years	12	12
More than 1 year	**30**	**33**
Less than 1 year	3	3
Mortgage debt at December 31	**33**	**36**
Credit institutions		
After 5 years	93	189
Between 1 and 5 years	482	497
More than 1 year	**575**	**686**
Less than 1 year	110	132
Credit institutions at December 31	**685**	**818**
Leasing obligations		
After 5 years	126	127
Between 1 and 5 years	4	3
More than 1 year	**130**	**130**
Less than 1 year	0	0
Leasing obligations at December 31	**130**	**130**
Deferred income		
After 5 years	0	10
Between 1 and 5 years	0	1
More than 1 year	**0**	**11**
Less than 1 year	1	1
Deferred income at December 31	**1**	**12**

The Group leases property under a non-cancellable finance lease agreement. The lease runs until 2036.
At the end of the lease period, the Group is obligated to purchase the property at a price of DKK 74 million.

Interest bearing debt at January 1	1,981	
Foreign currency translation adjustment	-9	
Instalments	-126	
Interest bearing debt at December 31	**1,846**	

Notes to the consolidated financial statements

Note 24
Other payables

DKK million	**2017**	**2016**
Staff related items	272	326
Fair value of derivative financial instruments	3	5
Tax related items	4	5
Other payables	228	191
Other payables at December 31	**507**	**527**
More than 1 year	3	4
Less than 1 year	504	523
Other payables at December 31	**507**	**527**

Note 25
Prepayments from customers

DKK million	**2017**	**2016**
Prepayments related to sale of goods	229	280
Prepayments from customers at December 31	**229**	**280**

Note 26
Assets provided as security

DKK million	**2017**	**2016**
Carrying amount of non-current assets (land and buildings) provided as security	203	233
Remaining balance of loans secured by non-current assets	33	36
Nominal value of the loans (real estate deeds and owners' mortgage deeds)	41	41
Remaining balance of loan secured by all assets of Haldor Topsoe Inc.	12	66

Assets are provided as security for mortgage debt and other long-term loans. In case of other debt to the secured creditor, the asset(s) provided as security may – until release thereof – serve as security for any present or future obligation that the Group may have towards such parties.

Notes to the consolidated financial statements

Note 27
Guarantees

DKK million	**2017**	**2016**
Guarantees given by banks and credit insurance institutions on the Group's behalf for contract work, etc.	735	749
Guarantees issued at December 31	**735**	**749**
Less than 1 year	292	405
Between 1 and 5 years	413	312
After 5 years	30	32
Guarantees issued at December 31	**735**	**749**

Note 28
Contractual obligations

DKK million	**2017**	**2016**
Less than 1 year	90	82
Between 1 and 5 years	238	203
After 5 years	404	384
Contractual obligations regarding leases at December 31	**732**	**669**
Payments for the year recognized as operating lease expenses	97	80

Leases and rental agreements relate mainly to premises and extend in some cases to 2032.

Note 29
Contingent liabilities
The Group's property in Frederikssund, Denmark, has been found to be contaminated. Management assesses that the remediation costs will not be significant.

Through participation in joint taxation scheme with Haldor Topsøe Holding A/S, the company is jointly and severally liable for taxes etc. payable in Denmark.

Note 30
Fee to auditors appointed at the general meeting
Please refer to the note in the consolidated financial statements for the parent company, Haldor Topsøe Holding A/S.

Notes to the consolidated financial statements

Note 31
Related parties

Control
Haldor Topsøe Holding A/S, Lyngby, Denmark – shareholder

DKK million	**2017**	**2016**
Management fee received from the parent company	0	2
Interest received from the parent company	2	6
Receivables from the parent company at December 31	371	535

DKK million

Related parties	**Transactions**	**2017**	**2016**
Companies under common control	Deposit	2	0
Joint venture	Administration fee	0	1

Remuneration to Executive Committee and Board of Directors, please see note 3.

Intercompany transactions have been eliminated in the consolidated financial statements.

Note 32
Derivative financial instruments

DKK million	**Contract amount 2017**	**Fair value 2017**	**Contract amount 2016**	**Fair value 2016**
Sale of KWD, matures in 2018	193	11	0	0
Forward exchange contracts at December 31	**193**	**11**	**0**	**0**

The Group uses forward exchange contracts to hedge against changes in exchange rates in volatile currencies for contract related payments up to 12 months forward. The fair value of the contracts is recognized in the balance sheet through other comprehensive income. The Group thus applies the rules on hedge accounting..

DKK million	**Contract amount 2017**	**Fair value 2017**	**Contract amount 2016**	**Fair value 2016**
EUR interest rate swap, matures on December 31, 2021	32	-3	41	-5
Interest rate swaps at December 31	**32**	**-3**	**41**	**-5**

The Group uses interest rate swaps to hedge against changes in interest rate levels and thus to reduce the interest rate risk. Interest rate swaps are used on floating rate loans. The fair value of the swaps is recognized in the balance sheet through other comprehensive income. The Group thus applies the rules on hedge accounting.

Notes to the consolidated financial statements

Note 32
Derivative financial instruments (continued)

DKK million	**Contract amount 2017**	**Fair value 2017**	**Contract amount 2016**	**Fair value 2016**
Aggregate amount of commodity swaps within metals, matures in 2019	3	0	0	0
Aggregate amount of commodity swaps within metals, matures in 2018	45	12	23	6
Aggregate amount of commodity swaps within metals, matures in 2017	0	0	73	13
Commodity swaps at December 31	**48**	**12**	**96**	**19**

The Group uses commodity swaps to hedge against price fluctuations in raw materials, primarily base metals (nickel, copper, and zinc) of specific production contracts. Hedging duration depends on the specific underlying contract, but it is typically less than 24 months. The fair value of the swaps is recognized directly in the income statement.

The cost of raw materials is a significant cost component in our products, and costs can fluctuate considerably. The Group seeks to minimize the risk related to commodity price fluctuations through contractual escalation clauses. In addition, the Group uses financial hedging when quoting fixed contract prices.

Note 33
Financial assets and liabilities

DKK million	**2017**	**2016**
Other securities and investments	316	348
Trade receivables	995	865
Other financial receivables	269	229
Cash	862	556
Financial assets at December 31	**2,442**	**1,998**
Bonds, mortgage debt, debt to credit institutions	1,716	1,851
Financial lease	130	130
Trade payables	382	486
Other financial liabilities	507	527
Financial liabilities at December 31	**2,735**	**2,994**
Assets available-for-sale	316	348
Financial assets measured at amortized cost	2,103	1,631
Derivative financial instruments	23	19
Classification of financial assets at December 31	**2,442**	**1,998**
Financial liabilities measured at amortized cost	2,732	2,989
Derivative financial instruments	3	5
Classification of financial liabilities at December 31	**2,735**	**2,994**

Notes to the consolidated financial statements

Note 33
Financial assets and liabilities (continued)

DKK million	**2017**	**2016**
Bonds, mortgage debt and debt to credit institutions:		
Payments:		
Less than 1 year	644	173
Between 1 and 5 years	1,032	1,595
After 5 years	113	300
Bonds, mortgage debt and debt to credit institutions at nominal value	**1,789**	**2,068**
Future finance charges	-73	-217
Bonds, mortgage debt and debt to credit institutions at present value	**1,716**	**1,851**
Leasing obligations		
Minimum lease payments:		
After 5 years	196	204
Between 1 and 5 years	29	28
Less than 1 year	7	7
Leasing obligations at nominal value	**232**	**239**
Future finance charges	-102	-109
Leasing obligations at present value	**130**	**130**
Trade payables:		
Less than 1 year	382	486
Derivative financial instruments:		
After 5 years	0	0
Between 1 and 5 years	3	4
Less than 1 year	0	1
Other financial liabilities:		
Less than 1 year	504	522

Notes to the consolidated financial statements

Note 33
Financial assets and liabilities (continued)

DKK million	**Level 1**	**Level 2**	**Level 3**
Other securities and investments	45	0	271
Derivative financial instruments	0	23	0
Distribution of assets stated at fair value at December 31, 2017	**45**	**23**	**271**
Derivative financial instruments	0	3	0
Distribution of liabilities stated at fair value at December 31, 2017	**0**	**3**	**0**

Level 1: Listed prices in an active market for the same type of instrument.

Level 2: Listed prices in an active market for similar assets or liabilities or other valuation methods according to which all material input is based on observable market data.

Level 3: Valuation methods according to which material input is not based on observable market data.

Please refer to note 11 for information on input to valuation of investments in other enterprises stated at fair value in level 3.

Fair value of contingent considerations
In the event that the operations of the divested Automotive Business achieve certain performance criteria during the period from January 1, 2018 to December 31, 2020, as specified in an 'Volume earn-out' clause in the sales agreement, an additional cash consideration will be receivable from the buyer. At year-end, the fair value of the 'Volume earn-out' was determined to be DKK 0 million, as Management assesses that the performance criteria are unlikely to be met.

There have been no transfers between levels 1, 2 and 3 during the year.

DKK million	**2017**	**2016**
Fair value of level 3 assets at January 1	313	363
Write-down recognized in other comprehensive income	-42	-50
Fair value of level 3 assets at December 31	**271**	**313**

Financial risks

Currencies
As Topsoe operates globally, the income statement, balance sheet, and cash flows are subject to the risk of currency fluctuations, mainly in relation to Topsoe's flows of EUR and USD.

Part of this risk is mitigated through natural hedges arising from activities where Topsoe has both income and expenses in the same currency. However, the risk is not fully covered by natural hedges, and consequently Topsoe hedges certain future cash flows. A 5% increase in the DKK/USD exchange rate is assessed to have a positive EBIT effect of DKK 15-20 million.

Interest rates
Long-term debt consists of loans and bonds with fixed and floating interest rates. Topsoe's policy is to maintain a loan portfolio where 35-50% is subject to floating interest rates and where 50-65% is subject to fixed interest rates. For the floating rate portion of Topsoe's interest-bearing debt, a change in the interest rate level of 1 percentage point will increase interest expenses by DKK 7 million.

Credit
The credit risk of Topsoe is primarily related to trade receivables from state-owned as well as privately owned corporations. Where feasible, we seek to mitigate credit risk by applying instruments such as letters of credit and bank guarantees as well as selective structuring of payment terms, etc. On a quarterly basis, it is assessed if the company should make accruals for bad debt, which is considered unlikely to be collected.

Notes to the consolidated financial statements

Note 33
Financial assets and liabilities (continued)

Financial risks (continued)

Liquidity
Topsoe must maintain sufficient liquidity to fund daily operations, debt service, and expansion. Topsoe's access to liquidity consists of cash and cash equivalents, including access to committed revolving credit facilities.

Note 34
Adjustments for non-cash items

DKK million	**2017**	**2016**
Financial income	-79	-93
Financial expenses	126	118
Result of investment in joint venture	30	15
Amortization, depreciation and impairment losses, including gains and losses from sale of assets	336	307
Tax	133	211
Other adjustments	-118	-5
Total adjustments for non-cash items	**428**	**553**

Note 35
Change in working capital

DKK million	**2017**	**2016**
Increase (-) / decrease in inventories	283	-126
Increase (-) / decrease in receivables	-203	400
Increase / decrease (-) in contract billing	-75	-392
Increase / decrease (-) in suppliers, etc.	-105	-32
Total change in working capital	**-100**	**-150**

Note 36
Subsequent events
No events materially affecting the Company's financial position at December 31, 2017 have occured after the balance sheet date.

Notes to the consolidated financial statements

Note 37
List of group companies

Name	Registered office	Voting and ownership share
Haldor Topsoe, Inc.	Houston, USA	100%
Topsoe Fuel Cell A/S	Lyngby, Denmark	100%
Haldor Topsoe India Pvt. Ltd.	New Delhi, India	100%
Haldor Topsøe (Beijing) Co., Ltd	Beijing, China	100%
Haldor Topsøe International A/S	Lyngby, Denmark	100%
Haldor Topsøe Sustainables A/S	Lyngby, Denmark	100%
OOO Haldor Topsøe	Moscow, Russia	100%
Haldor Topsoe America Latina S.A.	Buenos Aires, Argentina	100%
Haldor Topsoe Sdn. Bhd.	Kuala Lumpur, Malaysia	100%
Haldor Topsoe Canada Limited	Vancouver, Canada	100%
Subcontinent Ammonia Investment Company ApS	Lyngby, Denmark	100%
Haldor Topsoe S.A.	Cape Town, South Africa	100%
Haldor Topsoe Ohio, Inc.	Wilmington, USA	100%
Haldor Topsoe Science & Technology (Dalian) Co. Ltd.	Dalian, China	100%
Haldor Topsoe De Mexico, S. A. de C. V.	Mexico City, Mexico	100%
Haldor Topsoe do Brasil Tecnologia e Servicos em Catalisadores Eireli	Rio de Janeiro, Brazil	100%

Note 38
Discontinuing operations
On June 20, 2017, Topsoe announced that it had sold its emissions control business areas. The divestment involves a loss of DKK 362 million (mainly related to revaluation) and a loss of DKK 60 million of the discontinuing operations for eleven months of 2017. The total loss of the divestment and the discontinuing operations for 2017 of DKK 422 million is recognized in the financial statements for 2017. The divestment was finalized on November 30, 2017. The divestment comprises the business areas automotive and stationary DeNOx consisting of the subsidiaries Haldor Topsøe Catalyst (Tianjin) Co., Ltd., Haldor Topsøe Automotive Catalyst Trading (Tianjin) Co., Ltd. and Haldor Topsoe Catalisadores e Technologias do Brasil Ltda. as well as business assets and liabilities in Denmark, the US, and China.

The financial performance and cash flow information presented are for the eleven months ended November 30, 2017 (2017 column) and the year ended December 31, 2016.

DKK million	**2017**	**2016**
Revenue	652	674
Expenses	-705	-758
Loss before tax	**-53**	**-84**
Tax	-7	31
Loss after tax of discontinuing operations	**-60**	**-53**
Loss on sale of discontinuing operations	-362	-
Loss from discontinuing operations	**-422**	**-53**
Foreign currency translation adjustment from discontinuing operations	24	0
Other comprehensive income arising from discontinuing operations	**24**	**0**

Notes to the consolidated financial statements

Note 38 (continued)
Discontinuing operations

DKK million	**2017**	**2016**
Net cash inflow from operating activities	-284	-37
Net cash inflow (outflow) from investing activities (2017 includes an inflow of DKK 922 million from the divestment)	913	-160
Net cash (outflow) from financing activities	-126	0
Net increase in cash generated by the discontinuing operations	**503**	**-197**
Cash	956	-
Fair value of contingent considerations	0	-
Total received or receivable consideration	**956**	**-**
Carrying amount of net assets sold	-1,195	-
Transaction costs	-64	-
Loss on sale before income tax and reclassification of foreign currency translation reserve	**-303**	**-**
Reclassification of foreign currency translation reserve	-24	-
Income tax expense on loss	-35	-
Loss on sale	**-362**	**-**

In the event that the operations of the divested Automotive Business achieve certain performance criteria during the period from January 1, 2018, to December 31, 2020, as specified in a 'Volume earn-out' clause in the sales agreement, an additional cash consideration will be receivable from the buyer. At year-end, the fair value of the 'Volume earn-out' was determined to be DKK 0 million, as Management assesses that the performance criteria are unlikely to be met.

DKK million	**2017**	**2016**
Intangible assets	18	-
Property, plant and equipment	702	-
Financial assets	18	-
Inventories	313	-
Receivables	236	-
Non-current liabilities	-4	-
Current liabilities	-88	-
Total carrying amount of assets and liabilities in discontinuing operations at November 30, 2017	**1,195**	**-**

Financial statements of Haldor Topsoe A/S

Income statement of Haldor Topsoe A/S

DKK million	Note	2017	2016
Revenue	2	**4,372**	**4,993**
Change in inventories of finished goods and intermediate products		-35	60
Other operating income		11	13
Purchased equipment for contract work		-561	-734
Raw materials and consumables used		-1,173	-1,334
Other external expenses		-875	-969
Gross profit		**1,739**	**2,029**
Staff expenses	3	-1,155	-1,261
Depreciation, amortization and impairment losses		-224	-236
EBIT		**360**	**532**
Result of investments in group enterprises and joint venture	4	129	95
Financial income	5	60	72
Financial expenses	6	-107	-89
Profit before tax		**442**	**610**
Tax		-69	-122
Profit from continuing operations		**373**	**488**
Loss from discontinuing operations	27	-422	0
Net profit	7	**-49**	**488**

Balance sheet of Haldor Topsoe A/S

Assets		December 31	December 31
DKK million	**Note**	**2017**	**2016**
Rights		19	21
Patents		45	43
Software		20	26
Intangible assets under construction		0	3
Intangible assets	8	**84**	**93**
Land and buildings		579	594
Plant and machinery		608	702
Other fixtures and equipment		232	233
Property, plant and equipment under construction		119	197
Property, plant and equipment	9	**1,538**	**1,726**
Investments in group enterprises		1,312	1,557
Investments in joint venture		0	14
Receivables from group enterprises		2	599
Other securities and investments		44	35
Other receivables		32	17
Investments	10	**1,390**	**2,222**
Non-current assets		**3,012**	**4,041**
Inventories	11	**777**	**868**
Trade receivables		719	659
Contract work in progress	12	170	152
Receivables from group enterprises	13	543	778
Other receivables		207	98
Prepayments		14	23
Receivables		**1,653**	**1,710**
Cash		**613**	**179**
Current assets		**3,043**	**2,757**
Assets		**6,055**	**6,798**

Balance sheet of Haldor Topsoe A/S

Equity and liabilities		December 31	December 31
DKK million	**Note**	**2017**	**2016**
Share capital		376	376
Revaluation reserve		112	113
Net revaluation reserve according to the equity method		56	386
Reserve for unpaid share capital		241	241
Reserve for development costs		29	13
Retained earnings		625	901
Proposed dividend		225	209
Equity		**1,664**	**2,239**
Deferred tax	14	479	477
Provisions	15	242	180
Bonds	16	499	997
Mortgage debt	16	30	33
Credit institutions	16	575	672
Lease obligations	16	129	130
Other payables	16	3	4
Non-current liabilities		**1,957**	**2,493**
Bonds	16	499	0
Mortgage debt	16	3	3
Credit institutions	16	97	67
Lease obligations	16	1	0
Deferred income		1	1
Prepayments from customers	17	212	216
Contract work in progress	12	669	724
Trade payables		336	430
Payables to group enterprises		116	157
Corporate income tax		74	52
Other payables		426	416
Current liabilities		**2,434**	**2,066**
Liabilities		**4,391**	**4,559**
Equity and liabilities		**6,055**	**6,798**

Statement of changes in equity of Haldor Topsoe A/S

DKK million	**Share capital**	**Revaluation reserve**	**Net revaluation reserve according to the equity method**	**Reserve for unpaid share capital**	**Reserve for development costs**	**Retained earnings**	**Dividend proposed**	**Total**
Equity at January 1, 2017	376	113	386	241	13	901	209	2,239
Net profit	0	0	-186	0	0	-88	0	-274
Adjustments relating to separate foreign legal entities	0	0	-168	0	0	0	0	-168
Recycling currency translation adjustments from discontinuing operations	0	0	24	0	0	0	0	24
Fair value adjustment of derivative financial instruments	0	0	0	0	0	10	0	10
Capitalized development projects	0	0	0	0	16	-16	0	0
Other adjustments	0	-1	0	0	0	-57	0	-58
Net profit and income and expenses recognized under equity	**0**	**-1**	**-330**	**0**	**16**	**-151**	**0**	**-466**
Dividend paid	0	0	0	0	0	0	-209	-209
Interim dividend paid	0	0	0	0	0	-125	0	-125
Dividend proposed	0	0	0	0	0	0	225	225
Transactions with owners	0	0	0	0	0	-125	16	-109
Equity at December 31, 2017	**376**	**112**	**56**	**241**	**29**	**625**	**225**	**1,664**

Notes to the financial statements of Haldor Topsoe A/S

List of notes

Notes to the financial statements of Haldor Topsoe A/S

Note 1
Accounting policies

Basis of preparation

The financial statements of Haldor Topsoe A/S have been prepared in accordance with the provisions of the Danish Financial Statements Act applying to large enterprises of reporting class C. The accounting policies are unchanged from last year. However, cost of purchased finished goods has been reclassified from "Other external expenses" to "Raw materials and consumables used". The applied accounting policies are similar to those of the Group except for the following matters:

Discontinuing operations

Comparison figures for 2016 have not been restated in the income statement.

Other securities and investments

Other investments are measured at market value or estimated fair value. Unrealized value adjustments are included in the income statement in “Financial income” or “Financial expenses”.

Investments in group enterprises

Investments in group enterprises are recognized and measured under the equity method.

Group enterprises which have negative equity are measured at DKK 0, and receivables from these group enterprises are written down by the parent company’s share of the negative equity if it is estimated to be irrecoverable.

If the negative equity exceeds receivables, the remaining amount is recognized under provisions to the extent the parent company has a legal or constructive obligation to cover the group enterprise’s deficit.

The item “Result of investments in group enterprises” in the income statement includes the proportionate share of the result after tax.

Reserves

Reserve for development costs comprise development costs after depreciation and tax for self-constructed development projects.

Cash flow statement

No separate cash flow statement has been prepared for the parent company, as the parent company’s cash flow statement is included in the consolidated cash flow statement.

Notes to the financial statements of Haldor Topsoe A/S

Note 2
Revenue

The Company's activities are in the business segment of providing catalytic processes for integrated solutions to industrial plants. The provision of these integrated solutions comprises fundamental and applied research, reaction engineering, process engineering, mechanical design and production and supply of catalysts.

The Company has not disclosed the revenue split by segments for competitive reasons, as disclosure of this information is assessed to be potentially harmful to the Company.

Note 3
Staff expenses

DKK million	**2017**	**2016**
Wages and salaries	1,000	1,099
Pensions	114	119
Other social security contributions	58	53
Total	**1,172**	**1,271**
Capitalization of work performed on property, plant and equipment	-17	-10
Total staff expenses	**1,155**	**1,261**
Executive Management salary and pension	16	15
Fee to Board of Directors	7	5
Total remuneration to Executive Management and Board of Directors	**23**	**20**
Average number of employees	1,737	1,803

Note 4
Result of investments in group enterprises and joint venture

DKK million	**2017**	**2016**
Share of result of group enterprises, net	152	86
Change in intercompany profit	7	24
Share of result of joint venture, net	-30	-15
Total income from investments in group enterprises and joint venture	**129**	**95**

Note 5
Financial income

DKK million	**2017**	**2016**
Income from other investments	1	1
Interest received from group enterprises	2	28
Interest income	1	2
Foreign currency translation adjustment	39	39
Value adjustments of other investments	17	1
Other financial income	0	1
Total financial income	**60**	**72**

Notes to the financial statements of Haldor Topsoe A/S

Note 6
Financial expenses

DKK million	**2017**	**2016**
Interest expenses	50	46
Foreign currency translation adjustment	56	42
Value adjustments of other investments	1	0
Other financial expenses	0	1
Total financial expenses	**107**	**89**

Note 7
Proposed distribution of profit

DKK million	**2017**	**2016**
Proposed dividend	225	209
Interim dividend paid during the year	125	150
Net revaluation reserve according to the equity method	-186	-2
Retained earnings	-213	131
Total proposed distribution of profit	**-49**	**488**

Note 8
Intangible assets

DKK million	**Rights**	**Patents**	**Software**	**Intangible assets under construction**
Cost at January 1, 2017	25	111	157	3
Additions during the year	2	18	6	4
Disposals during the year	-2	-13	-7	0
Transfers during the year	0	0	7	-7
Cost at December 31, 2017	**25**	**116**	**163**	**0**
Amortization and impairment losses at January 1, 2017	4	68	131	0
Amortization during the year	2	9	14	0
Reversal of amortization and impairment losses on assets sold	0	-6	-2	0
Amortization and impairment losses at December 31, 2017	**6**	**71**	**143**	**0**
Carrying amount at December 31, 2017	**19**	**45**	**20**	**0**

Notes to the financial statements of Haldor Topsoe A/S

Note 9
Property, plant and equipment

DKK million	Land and buildings	Plant and machinery	Other fixtures and equipment	Property, plant and equipment under construction
Cost at January 1, 2017	799	2,131	847	197
Additions during the year	0	20	59	66
Disposals during the year	-12	-397	-95	-1
Transfers during the year	0	97	46	-143
Cost at December 31, 2017	**787**	**1,851**	**857**	**119**
Revaluation at January 1, 2017	198	8	0	0
Revaluation at December 31, 2017	**198**	**8**	**0**	**0**
Depreciation and impairment losses at January 1, 2017	403	1,437	614	0
Depreciation for the year	15	118	85	0
Reversal of depreciation on assets sold and scrapped	-12	-304	-74	0
Depreciation and impairment losses at December 31, 2017	**406**	**1,251**	**625**	**0**
Carrying amount at December 31, 2017	**579**	**608**	**232**	**119**
Carrying amount at December 31, 2017, under the depreciated cost model	435	608	232	119
Of this financial leased assets	125	0	0	0

Borrowing costs capitalized in 2017 amounted to DKK 0 million (2016: DKK 4 million).

Note 10
Investments

DKK million	Other securities and investments	Other receivables
Cost at January 1, 2017	24	34
Additions during the year	4	32
Disposals during the year	-9	-19
Transfers during the year	2	0
Cost at December 31, 2017	**21**	**47**
Value adjustment at January 1, 2017	11	-17
Value adjustment during the year	16	0
Disposals during the year	-2	17
Investments with negative equity transferred to receivables	0	-15
Transfers during the year	-2	0
Value adjustment at December 31, 2017	**23**	**-15**
Carrying amount at December 31, 2017	**44**	**32**

Notes to the financial statements of Haldor Topsoe A/S

Note 10
Investments (continued)

DKK million	**Investments in group enterprises**	**Investments in joint venture**	**Receivables from group enterprises**
Cost at January 1, 2017	1,145	39	599
Additions during the year	772	0	27
Disposals during the year	-958	0	-624
Cost at December 31, 2017	**959**	**39**	**2**
Revaluations at January 1, 2017	412	-25	0
Foreign currency adjustments	-134	0	0
Dividend	-315	0	0
Net profit for the year	181	-30	0
Disposals during the year	244	0	0
Other adjustments	-35	1	0
Investments with negative equity transferred to receivables	0	15	0
Revaluations at December 31, 2017	**353**	**-39**	**0**
Carrying amount at December 31, 2017	**1,312**	**0**	**2**

Other securities and investments are specified as follows:

Chambal Fertilizer and Chemical Ltd., India
Haldor Topsoe A/S has an investment in Chambal Fertilizer and Chemicals Ltd., corresponding to 0.48% of the share capital. The investment is measured at fair value based on listed market value.

Fatima Fertilizer Co. Ltd., Pakistan
Haldor Topsoe A/S has an investment in Fatima Fertilizer Co. Ltd., corresponding to 0.05% of the share capital. The investment is measured at fair value based on listed market value.

Faradion Ltd., United Kingdom
Haldor Topsoe A/S has an investment in Faradion Ltd., corresponding to 22.16% of the share capital. The investment is measured at fair value based on market value.

Fauji Fertilizer Company (FFC), Pakistan
Haldor Topsoe A/S has an investment in FFC corresponding to 0.000195% of the share capital. The investment is measured at fair value based on listed market value.

Investment in joint venture is specified as follows:

Ferrostaal Topsoe Projects GmbH
Haldor Topsoe A/S has invested in a joint venture together with Ferrostaal GmbH. The share capital of the joint venture is EUR 10 million of which Haldor Topsoe A/S owns 50%. The investment is measured under the equity method.

Notes to the financial statements of Haldor Topsoe A/S

Note 10
Investments (continued)

Investments in group enterprises are specified as follows:

Name	Registered office	Voting and ownership share
Haldor Topsoe, Inc.	Houston, USA	100%
Topsoe Fuel Cell A/S	Lyngby, Denmark	100%
Haldor Topsoe India Pvt. Ltd.	New Delhi, India	100%
Haldor Topsøe (Beijing) Co., Ltd	Beijing, China	100%
Haldor Topsøe International A/S	Lyngby, Denmark	100%
Haldor Topsøe Sustainables A/S	Lyngby, Denmark	100%
OOO Haldor Topsøe	Moscow, Russia	100%
Haldor Topsoe America Latina S.A.	Buenos Aires, Argentina	100%
Haldor Topsoe Sdn. Bhd.	Kuala Lumpur, Malaysia	100%
Haldor Topsoe Canada Limited	Vancouver, Canada	100%
Subcontinent Ammonia Investment Company ApS	Lyngby, Denmark	100%
Haldor Topsoe S.A.	Cape Town, South Africa	100%
Haldor Topsoe Ohio, Inc.	Wilmington, USA	100%
Haldor Topsøe Science & Technology (Dalian) Co., Ltd.	Dalian, China	100%
Haldor Topsoe De Mexico, S. A. de C. V.	Mexico City, Mexico	100%
Haldor Topsoe do Brasil Tecnologia e Servicos em Catalisadores Eireli	Rio de Janeiro, Brazil	100%

Note 11
Inventories

DKK million	2017	2016
Raw materials and consumables	160	216
Work in progress	94	103
Finished goods	523	549
Inventories at December 31	**777**	**868**

Note 12
Contract work in progress

DKK million	2017	2016
Selling price of work performed at the balance sheet date	5,494	5,292
Payments received on account	-5,993	-5,864
Contract work in progress at December 31	**-499**	**-572**
Contract work in progress recognized in assets	170	152
Contract work in progress recognized in liabilities	-669	-724
Contract work in progress at December 31	**-499**	**-572**

Notes to the financial statements of Haldor Topsoe A/S

Note 13
Receivables from group enterprises

DKK million	**2017**	**2016**
Deposit with the holding company	129	234
Unpaid share capital	241	241
Other receivables	173	303
Receivables from group enterprises at December 31	**543**	**778**

Deposit with the holding company is part of a cash pooling arrangement.

Note 14
Deferred tax

DKK million	**2017**	**2016**
Deferred tax at January 1, 2017	477	419
Tax for the year	2	58
Deferred tax at December 31	**479**	**477**
Intangible assets and property, plant and equipment	79	92
Inventories	22	26
Work in progress	386	360
Provisions	-25	-26
Other	17	25
Deferred tax at December 31	**479**	**477**
Deferred tax	479	477
Deferred tax recognized in the balance sheet at December 31	**479**	**477**

Deferred tax has been provided at mainly 22% corresponding to the current Danish tax rate.

Note 15
Provisions

DKK million	**2017**	**2016**
Warranty provision for catalysts and technology projects	196	179
Other provisions	46	1
Provisions at December 31	**242**	**180**
Of this, due after more than 1 year	242	180

Notes to the financial statements of Haldor Topsoe A/S

Note 16
Non-current liabilities

DKK million	**2017**	**2016**
Bonds		
After 5 years	0	0
Between 1 and 5 years	499	997
More than 1 year	**499**	**997**
Less than 1 year	499	0
Bonds at December 31	**998**	**997**
Amortization cost included under long-term liabilities, bonds.	2	3
Mortgage debt		
After 5 years	18	21
Between 1 and 5 years	12	12
More than 1 year	**30**	**33**
Less than 1 year	3	3
Mortgage debt at December 31	**33**	**36**
Credit institutions		
After 5 years	93	188
Between 1 and 5 years	482	484
More than 1 year	**575**	**672**
Less than 1 year	97	67
Credit institutions at December 31	**672**	**739**
Lease obligation		
After 5 years	126	127
Between 1 and 5 years	3	3
More than 1 year	**129**	**130**
Less than 1 year	1	0
Lease obligation at December 31	**130**	**130**
Other payables		
Between 1 and 5 years	3	4
More than 1 year	**3**	**4**
Less than 1 year	0	1
Other payables at December 31	**3**	**5**

Other payables consist of derivative financial instruments.

Notes to the financial statements of Haldor Topsoe A/S

Note 17
Prepayments from customers

DKK million	**2017**	**2016**
Prepayments related to sale of goods	212	216
Prepayments from customers at December 31	**212**	**216**

Note 18
Assets provided as security

DKK million	**2017**	**2016**
Carrying amount of non-current assets (land and buildings) provided as security	24	25
Remaining balance of loans secured by non-current assets	33	36
Nominal value of the loans (real estate deeds and owners' mortgage deeds)	41	41

Assets are provided as security for mortgage debt and other long-term loans. In case of other debt to the secured creditor, the asset(s) provided as security may – until release thereof – serve as security for any present or future obligation that the Company may have towards such parties.

Note 19
Guarantees

DKK million	**2017**	**2016**
Guarantees given by banks and credit insurance institutions on the Company's behalf for contract work, etc.	735	749
Guarantees issued at December 31	**735**	**749**
Bank guarantees received by the Company from suppliers for contract work, etc.	108	145
Letters of credit issued in favor of the Company as security for payments under various supply contracts	321	469

Note 20
Contractual obligations

DKK million	**2017**	**2016**
Less than 1 year	59	57
Between 1 and 5 years	178	177
After 5 years	404	384
Contractual obligations at December 31	**641**	**618**

Leases and rental agreements relate to premises and equipment, etc. and extend in some cases to 2032.

Note 21
Contingent liabilities
The Company's property in Frederikssund, Denmark, has been found to be contaminated. Management assesses that the remediation costs will not be significant.

Through participation in joint taxation scheme with Haldor Topsøe Holding A/S, the Company is jointly and severally liable for taxes etc. payable in Denmark.

Notes to the financial statements of Haldor Topsoe A/S

Note 22
Fee to auditors appointed at the general meeting

Please refer to the note in the consolidated financial statements for the parent company, Haldor Topsoe Holding A/S.

Note 23
Related parties

Control
Haldor Topsøe Holding A/S, Lyngby, Denmark – shareholder

No transactions have been carried out with the Board of Directors, Executive Committee, key management staff, shareholders, group enterprises or other related parties which have not been under normal market conditions.

Note 24
Derivative financial instuments

DKK million	Contract amount 2017	Fair value 2017	Contract amount 2016	Fair value 2016
Sale of KWD, matures in 2018	193	11	0	0
Forward exchange contracts at December 31	**193**	**11**	**0**	**0**

The Company uses forward exchange contracts to hedge against changes in exchange rates in volatile currencies, especially USD, for contract related payments up to 12 months forward.

DKK million	Contract amount 2017	Fair value 2017	Contract amount 2016	Fair value 2016
EUR interest rate swap, matures on December 31, 2021	32	-3	41	-5
Interest rate swaps at December 31	**32**	**-3**	**41**	**-5**

The Company uses interest rate swaps to hedge against changes in interest rate levels and thus to reduce the interest rate risk. Interest rate swaps are used on floating rate loans.

DKK million	Contract amount 2017	Fair value 2017	Contract amount 2016	Fair value 2016
Aggregate amount of commodity swaps within metals, matures in 2019	3	0	0	0
Aggregate amount of commodity swaps within metals, matures in 2018	45	12	23	6
Aggregate amount of commodity swaps within metals, matures in 2017	0	0	73	13
Commodity swaps at December 31	**48**	**12**	**96**	**19**

The Company uses commodity swaps to hedge against price fluctuations in raw materials, primarily base metals of specific production contracts. Hedging duration depends on the specific underlying contract, but it is typically less than 24 months.

The cost of raw materials is a significant cost component in our products, and costs can fluctuate considerably. The Company seeks to minimize the risk related to commodity price fluctuations through contractual escalation clauses. In addition, the Company uses financial hedging when quoting fixed contract prices.

Notes to the financial statements of Haldor Topsoe A/S

Note 25
Subsequent events
No events materially affecting the Company's financial position at December 31, 2017 have occured after the balance sheet date.

Note 26
Consolidated financial statements
Haldor Topsøe Holding A/S prepares consolidated financial statements, which include the Company and its group enterprises.

Note 27
Discontinuing operations
On June 20, 2017, Topsoe announced that it had sold its emissions control business areas. The divestment involves a loss of DKK 421 million (mainly related to revaluation) and a loss of DKK 1 million of the discontinuing operations for eleven months of 2017. The total loss of the divestment and the discontinuing operations for 2017 of DKK 422 million is recognized in the financial statements for 2017. The divestment was finalized on November 30, 2017. The divestment comprises the business areas automotive and stationary DeNOx consisting of the subsidiaries Haldor Topsøe Catalyst (Tianjin) Co., Ltd., Haldor Topsøe Automotive Catalyst Trading (Tianjin) Co., Ltd., and Haldor Topsoe Catalisadores e Technologias do Brasil Ltda. as well as business assets and liabilities in Denmark, the US, and China. The financial performance information presented is for the eleven months ended November 30, 2017.

DKK million	**2017**
Loss from discontinuing operations	
Revenue	391
Expenses	-403
Loss before tax	**-12**
Tax	11
Loss after tax of discontinuing operations	**-1**
Loss on sale of discontinuing operations	-421
Loss from discontinuing operations	**-422**
Loss on sale	
Cash	697
Fair value of contingent considerations	0
Total received or receivable consideration	**697**
Carrying amount of net assets sold	-1,037
Transaction costs	-53
Loss on sale before income tax and reclassification of foreign currency translation reserve	**-393**
Reclassification of foreign currency translation reserve	-24
Income tax expense on loss	-4
Loss on sale	**-421**

In the event that the operations of the divested Automotive Business achieve certain performance criteria during the period from January 1, 2018 to December 31, 2020, as specified in a 'Volume earn-out' clause in the sales agreement, an additional cash consideration will be receivable from the buyer. At year-end, the fair value of the 'Volume earn-out' was determined to be DKK 0 million, as Management assesses that the performance criteria are unlikely to be met.

Notes to the financial statements of Haldor Topsoe A/S

Note 27
Discontinuing operations (continued)

DKK million	**2017**
Total carrying amount of assets and liabilities in discontinuing operations	
Intangible assets	8
Property, plant and equipment	111
Financial assets	714
Inventories	104
Receivables	129
Non-current liabilities	0
Current liabilities	-29
Total carrying amount of assets and liabilities in discontinuing operations at November 30, 2017	**1,037**

Comparison figures for 2016 have not been restated.

Statement by the Executive Committee and Board of Directors on the Annual Report

The Executive Committee and Board of Directors have today considered and approved the Annual Report 2017 of Haldor Topsoe A/S.

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the EU (IFRS), and the financial statements of the parent company have been prepared in accordance with the Danish Financial Statements Act.

In our opinion, the parent company financial statements and the consolidated financial statements give a true and fair view of the financial position at December 31, 2017 of the Group and the parent company and of the results of the Group and parent company operations and of the Group's cash flows for 2017 in accordance with the applied accounting policies.

In our opinion, the Management's review includes a true and fair account of the development in the operations and financial circumstances, 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.

We recommend that the Annual Report be adopted at the Annual General Meeting.

Lyngby, March 20, 2018

Executive Committee

Bjerne S. Clausen
President and CEO

Peter Rønnest Andersen
Executive Vice President and CFO

Board of Directors

Jeppe Christiansen
Chairman

Jørgen Huno Rasmussen
Vice Chairman

Jakob Haldor Topsøe
Vice Chairman

Jens Kehlet Nørskov
Member

Henrik Stiesdal
Member

Christina Teng Topsøe
Member

Anders Heine Jensen
Member

Jette Søvang Christiansen
Employee representative

Aino Irene Saldo
Employee representative

Søren Toft
Employee representative

Martin Østberg
Employee representative

Independent Auditor's Report

To the Shareholders of Haldor Topsoe A/S

Opinion
In our opinion, the Consolidated Financial Statements give a true and fair view of the Group's financial position at December 31, 2017 and of the results of the Group's operations and cash flows for the financial year January 1 to December 31, 2017 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, 2017 and of the results of the Parent Company's operations for the financial year January 1 to December 31, 2017 in accordance with the Danish Financial Statements Act.

We have audited the Consolidated Financial Statements and the Parent Company Financial Statements of Haldor Topsoe A/S for the financial year January 1 - December 31, 2017, which comprise income statement, balance sheet, statement of changes in equity and notes, including a summary of significant accounting policies, for both the Group and the Parent Company, as well as statement of comprehensive income and cash flow statement for the Group ("financial statements").

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 section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) and the additional requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Statement on Management's review
Management is responsible for Management's review.

Our opinion on the financial statements 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 during the audit, or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether Management's review provides the information required under the Danish Financials Statements Act.

Based on the work we have performed, in our view, Management's review is in accordance with the Consolidated Financial Statements and the Parent Company Financial Statements and has been prepared in accordance with the requirements of the Danish Financial Statement Act. We did not identify any material misstatement in Management's review.

Management's responsibilities for the Financial Statements
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.

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 in preparing the financial statements 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
Our objectives are to obtain reasonable assurance about whether the financial statements 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.

As part of an audit conducted 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, 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 in preparing the financial statements 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 and the Parent Company to cease to continue as a going concern.
> Evaluate the overall presentation, structure and contents 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 of the entities or business activities within the Group to express an opinion on the Consolidated Financial Statements. 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.

Copenhagen, March 20, 2018

PricewaterhouseCoopers
Statsautoriseret Revisionspartnerselskab
CVR No 33 77 12 31

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State Authorized Public Accountant
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