Royal DSM Integrated Annual Report 2016

HEALTH · NUTRITION · MATERIALS

DSM

BRIGHT SCIENCE. BRIGHTER LIVING.

DSM at a glance

Nutrition

The **Nutrition** cluster comprises DSM Nutritional Products and DSM Food Specialties. These businesses serve the global industries for animal feed, food and beverages, pharmaceutical, infant nutrition, dietary supplements and personal care.

DSM Nutritional Products is one of the world's leading producers of essential nutrients such as vitamins, carotenoids, nutritional lipids and other ingredients for the feed, food, pharmaceutical and personal care industries. Among its customers are the world's largest food and beverage companies. DSM is uniquely positioned, offering a combination of global products and local solutions, with a strong focus on innovation. DSM Nutritional Products consists of the following business units:

Animal Nutrition & Health addresses the nutritional additives segment of the global feed ingredients market. DSM's products and premixes include vitamins, feed enzymes, carotenoids, minerals and eubiotics.

Human Nutrition & Health primarily addresses the nutritional ingredients markets, but is also active in coloration and preservation in the global food ingredients market.

Personal Care & Aroma Ingredients focuses on active and performance ingredients such as vitamins, UV filters and bio-actives for the skin care, sun care and hair care market segments.

DSM Food Specialties is a leading global supplier of food enzymes, cultures, yeast extracts, savory flavors, hydrocolloids and other specialty ingredients to the food and beverage industries. DSM Food Specialties' advanced ingredients make a considerable contribution to the success of the world's favorite brands for the dairy, baking, beverages and savory segments.

Materials

The **Materials** cluster consists of DSM Engineering Plastics, DSM Dyneema and DSM Resins & Functional Materials. These business groups are active in specialty materials for technologically sophisticated applications and offer specialized value propositions.

DSM Engineering Plastics is a global player in developing, manufacturing and marketing high-performance plastics, addressing key markets in automotive and electronics, and providing solutions to specialized industries including water management, breathable textiles and flexible food packaging.

DSM Dyneema is the inventor, manufacturer and marketer of Dyneema®, the world's strongest fiber™. This product, based on ultra high molecular weight polyethylene, is produced by means of DSM's proprietary processes. The Dyneema® brand enjoys very high recognition in the value chains served.

DSM Resins & Functional Materials is a global player in developing, manufacturing and marketing high-quality resins solutions for paints, industrial coatings and fiber-optic coatings. Its continuous innovation means that customers can meet regulatory needs and respond better to consumer demands for more sustainable materials.

Innovation Center

DSM Innovation Center serves as an enabler and accelerator of innovation within DSM, providing support to the clusters. With its Emerging Business Areas, the Business Incubator and DSM Venturing & Licensing, it also has a general business development role, focusing on areas outside the current scope of the business groups.

DSM's Emerging Business Areas provide strong long-term growth platforms based on the company's core competences in life sciences and materials sciences. The company has three Emerging Business Areas:

DSM Biomedical supplies innovative biomedical materials that enable medical device manufacturers to make less invasive devices. These can speed up recovery, shorten hospital stays and minimize reoperations, lowering health costs and helping people to lead longer, healthier and more active lives.

DSM Bio-based Products & Services is at the forefront of building a more sustainable, bio-based economy with solutions for clean fuel from agricultural residue and for renewable chemical building blocks such as bio-based succinic acid.

DSM Advanced Solar develops and provides solutions to increase the yield of solar panels – Same sun. More power™.

Partnerships

DSM Sinochem Pharmaceuticals (DSP), a 50-50 joint venture formed in 2011, is the global market leader in beta-lactam active pharmaceutical ingredients (APIs) such as semi-synthetic penicillins and semi-synthetic cephalosporins. It is also a leader in other active ingredients such as nystatin and next-generation statins.

Patheon is a global leader in contract development and manufacturing services established in 2014 and approximately 34%-owned by DSM, with customers across the pharmaceutical industry.

ChemicalInvest is a joint venture established in 2015 in which DSM has a 35% shareholding, and comprises the former DSM Fibre Intermediates (caprolactam and acrylonitrile) and DSM Composite Resins businesses.

DSM – Bright Science. Brighter Living.™

Our purpose is to create brighter lives for people today and generations to come. We use our unique competences in health, nutrition and materials to create solutions that nourish, protect and improve performance.

DSM uses its Bright Science to create Brighter Living for people today and generations to come. Based on a deep understanding of key global trends that are driving societies, markets and customers, we create solutions to some of the world's biggest challenges, thus adding to both our own and our customers' success.

We believe that DSM's continued success will be driven by our ability to create shared value for all stakeholders, now and in the future. Our customers derive value from being able to offer end-users improved products and services; society and the planet derive value from the impact of more sustainable, longer-lasting, safer, healthier and more nutritious alternatives; and, as a result, DSM and its shareholders derive value from stronger growth and profitability. Finally, our employees feel engaged and motivated both through the contribution they make to a better world and the success this creates for the company in which they work. More information on 'How DSM creates value for its stakeholders' can be found on page 20.

DSM – Bright Science. Brighter Living.™

Royal DSM is a global science-based company active in health, nutrition and materials. By connecting its unique competences in life sciences and materials sciences, DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders simultaneously. DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM and its associated companies deliver annual net sales of about € 10 billion with approximately 25,000 employees. The company is listed on Euronext Amsterdam. More information can be found at www.dsm.com.

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Forward-looking statements
This document may contain forward-looking statements with respect to DSM's future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. Examples of forward-looking statements include statements made or implied about the company's strategy, estimates of sales growth, financial results, cost savings and future developments in its existing businesses as well as the impact of future acquisitions, and the company's financial position. These statements can be management estimates based on information provided by specialized agencies or advisors.

DSM cautions readers that such statements involve certain risks and uncertainties that are difficult to predict and therefore it should be understood that many factors can cause the company's actual performance and position to differ materially from these statements. These factors include, but are not limited to, macro-economic, market and business trends and conditions, (low-cost) competition, legal claims, the company's ability to protect intellectual property, changes in legislation, changes in exchange and interest rates, changes in tax rates, pension costs, raw material and energy prices, employee costs, the implementation of the company's strategy, the company's ability to identify and complete acquisitions and to successfully integrate acquired companies, the company's ability to realize planned divestments, savings, restructuring or benefits, the company's ability to identify, develop and successfully commercialize new products, markets or technologies, economic and/or political changes and other developments in countries and markets in which DSM operates. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the 'Risk Management' chapter.

As a result, DSM's actual future performance, position and/or financial results may differ materially from the plans, goals and expectations set forth in such forward-looking statements. DSM has no obligation to update the statements contained in this document, unless required by law. The English language version of this document is leading.

Key data

Key data[1]

	2016[2]	2015[2]
People		
Workforce at 31 December (headcount)	20,786	20,796
Female/male ratio	27/73	28/72
Total employee benefits costs (in € million)	1,752	1,778
Frequency Index of Recordable Injuries (per 100 DSM employees and contractor employees)	0.33	0.41
Employee engagement - favorable score (in %)	71	69
Planet		
Energy use (in petajoules)	22.6	20.9
Energy Efficiency Improvement (in %, year-on-year)	2	
Greenhouse-gas emissions in CO_2 equivalents (x million tons)	1.5	1.1
Greenhouse-gas efficiency improvement (in %, baseline 2008)	23	20
Water use (x million m^3)	104	101
Brighter Living Solutions (as % of net sales)	63	
Profit (in € million)		
Net sales, continuing operations	7,920	7,722
Adjusted EBITDA, continuing operations[3]	1,262	1,075
EBITDA, continuing operations	1,174	956
Adjusted operating profit, continuing operations (EBIT)[3]	791	573
Operating profit, continuing operations (EBIT)	685	362
Net profit attributable to equity holders of Koninklijke DSM N.V.	621	88
Cash provided by operating activities	1,018	696
Capital expenditure, cash based	475	536
Dividend for DSM shareholders	310	297
Net debt	2,070	2,321
Shareholders' equity	6,072	5,541
Total assets	12,958	11,743
Capital employed, continuing operations	7,889	7,553
Market capitalization at 31 December[4]	10,334	8,396
Per ordinary share in €		
Net earnings	3.52	0.45
Dividend	1.75[5]	1.65
Financial ratios (%)		
Sales to high growth economies / net sales	44	44
Innovation sales / net sales	22	24
Adjusted EBITDA margin (continuing operations)	15.9	13.9
Average working capital / annualized net sales (continuing operations)	18.6	20.7
ROCE (continuing operations)	10.4	7.6
Gearing (net debt / equity plus net debt)	25.1	29.2
Equity / total assets	47.5	48.0
Cash provided by operating activities / Adjusted EBITDA	80.7	59.5

1 For definitions see 'Explanation of some concepts and ratios' on page 217.
2 Key data presented relate to total DSM (= continuing operations + discontinued operations), unless explicitly stated otherwise.
3 In presenting and discussing DSM's financial position, operating results and cash flows, DSM (similar to many other publicly listed companies) uses certain Alternative performance measures (APMs) not defined by IFRS. These APMs are used because they are an important measure of DSM's business development and DSM's management performance. A full reconciliation of IFRS performance measures to the APMs is given in the 'Alternative performance measures (APMs)' on page 142.
4 Source: Bloomberg.
5 Subject to approval by the Annual General Meeting of Shareholders.

People

Workforce
(at year-end 2016)

20,786

Employee engagement favorable score
(in %)

71

Number of nationalities
(at year-end 2016)

98

Frequency Index of Recordable Injuries
(per 100 DSM employees and contractor employees)

0.33

Brighter Living Solutions
as % of net sales

63

Planet

Greenhouse-gas emissions, total DSM
(in million tons CO_2eq)

1.5

Energy use, total DSM
(in petajoules)

22.6

Water consumption, total DSM
(in million m^3)

22

Innovation sales as % of total sales

22

Profit[1]

Net sales
(in million)

€ 7,920

Adjusted EBITDA[2]
(in million)

€ 1,262

Adjusted EBITDA growth

17%

Net profit, total DSM
(in million)

€ 621

Capital expenditure (cash-based)
(in million)

€ 475

Cash provided by operating activities, total DSM
(in million)

€ 1,018

Net earnings per ordinary share, total DSM

€ 3.52

Dividend per ordinary share[3]

€ 1.75

ROCE (in %)

10.4

ROCE growth (in bps)

280

[1] Continuing operations unless explicitly stated otherwise
[2] See page 142 for reconciliation
[3] Subject to approval by the Annual General Meeting of Shareholders

Letter from the CEO

Dear reader,

Toward the end of 2015 we presented Royal DSM's strategic plan for the period up to and including 2018. We designed Strategy 2018: *Driving Profitable Growth* to capture the full potential of the portfolio of business activities we have carefully created over the years, by increasing organic growth, reducing costs, and improving our performance by strict capital allocation and a stronger organizational agility. For the time being we are not focused on major acquisitions. In the coming years we intend to monetize our three large joint ventures.

We set two mid-term headline financial targets for the strategic period, namely a high single-digit percentage annual Adjusted EBITDA growth and a high double-digit basis point improvement in return on capital employed (ROCE). This reflects our commitment to delivering a step-up in financial performance.

We also set out stretching aspirations in the area of sustainability relating to our own operations, our customer solutions, and our impact on the world. At the same time, we aim to further develop our talent pool to ensure that we can sustainably address the challenges and demands placed upon us.

> "We are intent on 'future-proofing' DSM, delivering higher value to all our stakeholders."

DSM is making very good progress toward these targets. Starting already in 2015, we have taken demonstrable steps each quarter and posted 2016 results well ahead of our mid-term targets, improving both profit (Adjusted EBITDA up 17% from € 1,075 million to € 1,262 million) and returns (ROCE up 280 bps from 7.6% to 10.4%). We also succeeded in making our own operations more sustainable while at the same time increasing the proportion of Brighter Living Solutions our customers buy from us.

Our performance in 2016

Our strong operational and financial progress in 2016 has been driven by both Nutrition and Materials, supported by our growth initiatives, ambitious improvement and cost-saving actions, and strict capital allocation. This has enabled us to translate our top-line growth into a significant step-up in (financial) returns in 2016. Capital expenditure in support of DSM's future growth amounted to just below € 0.5 billion. We furthermore undertook numerous actions to manage working capital; total working capital to sales stood at 18.4% at the end of the year, which is better than the 20% we aspire to stay below.

The Nutrition cluster posted strong organic growth figures for 2016, with both the animal and human nutrition businesses contributing. Animal Nutrition & Health maintained momentum from 2015 and had a strong year. We are also pleased with our performance in Human Nutrition & Health, where we clearly saw the benefits of our improvement actions. One of the highlights of the year was the continued rapid pace of growth for our i-Health consumer range of dietary supplements. Having proved its popularity in the US, it is now also available in a number of other countries. Our Food Specialties and Hydrocolloids texturing businesses also showed good results.

Our Materials businesses enjoyed a particularly successful 2016. We recorded strong growth in volumes, above all in specialty materials – a clear indication that our product portfolio upgrade toward specialties and our application expertise resonate well with our customers in higher-growth and higher-value market segments. Furthermore, we worked hard to manage margins in a low-input cost environment. We again recorded a step-up in returns in Materials in 2016, clearly well above the level of previous years.

At the same time as vigorously driving business growth, we are transforming our organization. We are implementing a number of major programs, which are not just aimed at lowering our cost base, but also intend to make our company more agile, resilient and market- and performance-focused, enabling DSM to fulfill its growth ambitions.

The improvement programs target € 250-300 million in cost savings versus the 2014 baseline by the end of 2018. All these initiatives are fully on track and the effects are already visible in DSM's financial and operational progress. We are committed to maintaining our focus and fully executing these programs. The adverse consequence of this is a reduction of around 1,000 FTEs between 2015 and 2017 – a decision that was not taken lightly. I continue to be humbled by the constructive and professional attitude shown by those who have been affected by these changes.

Science and innovation drives our growth

As a science-based company, one of the pillars supporting DSM's success in the marketplace is our ability to develop new, more sustainable solutions. Every day, our scientists strive to provide answers to global challenges, going to great lengths in doing so. In fact, scientists across the world are the unsung heroes of our time, often working in relative anonymity. Yet they inspire us by making a positive difference and a real societal impact. Our 'Science Can Change The World' campaign celebrates this crucial contribution and entered a new phase in 2016 with the Bright Minds Challenge, looking to fast-forward renewable energy solutions.

We introduced a number of innovations in 2016, including specialty materials that help the automotive industry in its quest to make vehicles lighter and safer, and a new technology enabling the production of highly concentrated omega-3 fish oil. We also continued work on programs for the future, many of which are directly linked to environmental or public health challenges. These include our fermentative stevia sweetener platform in Nutrition to help reduce the sugar in our diets, Clean

Cow, aimed at cutting methane emissions from cattle, and our Green Ocean partnership to make fish farming more sustainable.

The concept of the circular economy is becoming reality, and the DSM-Niaga joint venture took an important step, announcing that its technology is ready for commercial-scale production. This 100%-recyclable carpet is proof that products can be re-designed along circular economy principles of use and multiple re-use.

Looking to our Emerging Business Areas, we have experienced a delay in the start-up of the advanced biofuels facility in the US together with our partner POET. Efforts to address this took effect toward the end of the year. DSM Biomedical made steady progress, with higher volumes, especially in high-growth segments of the medical device market including cardiology, ophthalmics and orthopedics. We continued to see good growth in solar energy materials with DSM Advanced Solar. The Innovation Center reached Adjusted EBITDA break-even in 2016, as planned.

Monetizing our partnerships

Over recent years, we have carved out non-core areas of the portfolio in pharma and bulk chemicals and transferred these into partnerships. We will exit these over time, monetizing our holdings. In 2016, we took a first step through our participation in the very successful IPO of Patheon, resulting in a significant first financial gain and creating the opportunity to monetize further in the coming years. DSM Sinochem Pharmaceuticals progressed well, and we will continue to review the best options for divesting this business. Finally, for the third main partnership, ChemicaInvest with controlling partner CVC, 2016 was the first full year of operation and the focus was on improving results. In all these cases we will choose an appropriate moment to exit. Proceeds will initially be used for de-leveraging our balance sheet and to support organic growth, while unlocking the potential for acquisitions over time.

Sustainability, our core value

For DSM, sustainability is our core value and a key responsibility, as well as an important business driver. We focus on delivering science-based, sustainable and scalable solutions that address the challenges of today's world in our main areas of competence. Not only do these products and solutions offer higher growth rates and better margins; our continuous endeavor for sustainability also makes us focus on reducing operating costs by decreasing our environmental footprint.

In 2016, over 60% of DSM's sales were products offering measurably better environmental performance and/or societal benefits than mainstream alternatives in areas such as working conditions and health. With these Brighter Living Solutions, we help our customers make their own businesses more sustainable.

We have identified three sustainable growth platforms – areas where our core competences intersect with urgent societal challenges. These are: nutrition; climate & energy; and circular & bio-based economy. We will grow these platforms through partnering, advocacy and engagement, and through our proprietary solutions, increasing our positive impact and doing good business at the same time. Africa Improved Foods, the outcome of a multi-stakeholder approach to support the government of Rwanda in tackling stunting and stimulating economic development, is just one example.

Our corporate strategy and our growth platforms are well aligned with the United Nations' Global Goals for Sustainable Development. These goals – often referred to as the 'SDGs' – are increasingly moving into implementation mode, underscoring the need for effective solutions at scale to which businesses like DSM can make an influential contribution. We are particularly proud of our strategic partnership with the UN World Food Programme, which contributes directly to Goal 2 (Zero Hunger). Among others, DSM's activities also strongly address Goal 13 (Climate Action). Achieving the SDGs will help build societal and economic resilience worldwide. You can read more about how our company supports the SDGs throughout this Report.

The global economy presented a mixed picture in 2016, with growth remaining patchy. This was reflected in our businesses, where conditions in some territories such as in Latin America were difficult, while in others we grew well – for example, in India, China, the US and Europe. Social inequalities and economic imbalances also led to political turbulence in some parts of the world, which influenced the wider global economy. In the face of these continuing uncertainties, the SDGs remind us of the importance of taking a long-term view.

Our social and environmental performance

In 2016, we further improved the social and environmental performance of our operations. The safety and health of our workforce is our most immediate concern and I am happy to report that there was a reduction in the number of recordable injuries during the year. We remain committed to reducing this number still further. For more information on safety and health and on these and other incidents, see ‘People in 2016’ on page 39 and ‘What still went wrong in 2016’ on page 122.

Our Employee Engagement Survey showed a clear improvement versus last year, demonstrating that we are on the right track. We also continued to strive for a representative balance across our organization in terms of gender and nationality, addressing our Inclusion & Diversity beliefs and goals. We are pleased with the improvement in the number of women in executive and senior leadership positions in recent years, yet we realize we must increase this momentum still further. Our ability to hire, develop, evaluate and manage our talented people is a fundamental enabler for DSM’s continued success. Last year, we rolled out a revamped global talent management approach across the company and further embedded the DSM leadership model.

We made pleasing progress in 2016 toward our multi-year targets for reducing our own environmental footprint, including further improving our greenhouse-gas efficiency and energy efficiency, as well as taking important steps toward our renewable electricity targets. DSM is among a growing number of companies to have implemented an internal carbon price (in our case of € 50/ton CO_2 equivalents) to help guide investment decisions toward low fossil-carbon choices. We support carbon pricing as an instrument to address climate change, and I am honored to co-chair, together with Minister Ségolène Royal of France, the Carbon Pricing Leadership Coalition, an initiative launched by the World Bank, the UN and the International Monetary Fund.

All of us at DSM take pride when our efforts receive external recognition. Among numerous other things, we were very pleased to be named the global industry leader in the Dow Jones Sustainability World Index in 2016. We were also delighted to be mentioned in Fortune Magazine’s ‘Change the World List’ of companies that are “doing well by doing good.” This resonates well with how we view our purpose as a company.

We continually aim to improve our integrated reporting, and this Report follows the GRI Standards from the Global Reporting Initiative as well as the <IR> framework of the International Integrated Reporting Council. We remain committed to aligning our strategy and operations with the principles of the UN Global Compact, as well as contributing to the realization of the UN Global Goals.

Our thanks to all who contribute

In conclusion, 2016 was a good year for DSM. We are pleased with our progress and have many reasons to be confident. On behalf of my colleagues, I would like to extend our thanks to everyone who has contributed to this success: our employees, customers, suppliers and other business partners. We are grateful for the trust of our shareholders and will continue to serve the interests of all our stakeholders as well as we can. We also express our gratitude to Stephan Tanda, who has been instrumental on DSM’s Managing Board in creating our unique, broad and global Nutrition business, and has moved on to become CEO of the AptarGroup, Inc. We wish him well after nine years of work for DSM. Also many thanks to Ewald Kist, whose final term as a Member of DSM’s Supervisory Board came to an end in 2016 after 12 years of service. We highly value his balanced, long-term thinking.

I would like to finish by once again thanking all who contributed to this successful year 2016 and the achievements of the DSM we have built together: we do this all to create brighter lives for people today and generations to come.

Feike Sijbesma
CEO/Chairman Managing Board Royal DSM

Nourishing the Base of the Pyramid

The Base of the Pyramid (BoP) comprises some four billion people who subsist on USD 2 per day or less. Around 800 million of these suffer from hunger, and many more are malnourished. The food basket for these people often lacks key nutrients due to its reliance on grains and rice, which provide mainly carbohydrates and thus essential calories but not the full range of nutrients required for good health.

At DSM, we use our products, expertise and partnerships to help support this group through programs designed to address malnutrition by means of food fortification, among other things. The fortification of staples such as wheat flour, maize flour, oil, margarine and salt has a long history. Rice fortification is much more technically complex. DSM's work in this field began almost two decades ago through a collaboration with Bühler for the development of coating and hot extrusion technologies. In 2010, we began working together with WFP on rice fortification, conducting trials for including fortified rice in school meals in Egypt. We have since scaled up our involvement with many other countries and partners.

Scaling up rice fortification in Bangladesh

A joint project by WFP and the Government of Bangladesh, supported and funded by the DSM-WFP partnership and the Dutch Embassy in Dhaka, has been established with the goal of contributing to the reduction of micronutrient deficiencies in high-risk groups. Focusing strongly on women and children in Bangladesh, the project encouraged the consumption of nutrient-rich fortified rice.

45Rice, Singapore

In a study by the National University of Singapore, just over 80% of interviewed migrant workers reported that the quality of food provided to them was "poor" and lacking in the necessary micronutrients (vitamins and minerals). A collaboration with the NGO BoP Hub to address this resulted in the founding of the social enterprise 45Rice in January 2016. 45Rice will supply hospitals, foundations, low-income communities, and the commercial market (FairPrice) in Singapore with rice premix and fortified rice kernels.

Africa Improved Foods, Rwanda

In 2015, DSM was invited by the Government of Rwanda to participate alongside other partners in Africa Improved Foods (AIF) with the challenge to address micronutrient deficiencies ('hidden hunger'), support local economic development, and create a commercially sustainable business operation in Rwanda. AIF now employs 260 people who produce fortified cereals and porridges for pregnant and lactating women, toddlers, and older children. The maize and soy used are sourced locally from over 9,000 local farmers, providing a market and a sustainable source of income for these smallholdings.

Rice fortification workshop in Dominican Republic

Over 100 stakeholders were brought together at the workshop 'Scaling Up Rice Fortification in Latin America and the Caribbean' in August 2016. This workshop was organized by WFP with funding and support from the DSM-WFP partnership. It was designed to share global and regional evidence and operational experience; support countries in the process of developing a country-specific plan for rice fortification; facilitate the process of consultation and the exchange of experience between countries in the region; and create a network for continued learning and knowledge-sharing.

DSM and the Sustainable Development Goals

1 NO POVERTY

Our HR policies on (minimum) wages and fair pay. We support smallholdings through Africa Improved Foods (AIF), help improve agricultural learning through our partnership with the UN WFP and participate in economic development programs in developing countries. ••

2 ZERO HUNGER

We improve nutrition via initiatives such as the Nutrition Improvement Program and AIF, as well as through partnerships such as with the WFP and SUN. We continue to support Sight and Life, the nutrition think-tank. •••

3 GOOD HEALTH AND WELL-BEING

Our biomedical, health and nutrition product portfolio is geared to maintaining, protecting or regenerating health. The DSM Life Saving Rules and the DSM Vitality Program support safety in the workplace and good health for our employees. •••

4 QUALITY EDUCATION

We support our employees' personal and professional development through our learning and development programs. We help improve agricultural learning through our partnership with the WFP. •

5 GENDER EQUALITY

The DSM Inclusion & Diversity Strategy and aspirations, and our sponsorship of WIN to foster female leadership. Our CEO is signatory to the CEO Statement of Support for the Women's Empowerment Principles and is a board member of Catalyst. ••

6 CLEAN WATER AND SANITATION

We identify and take action on areas of water scarcity with waste water efficiency and treatment programs such as at DSM in Pune (India). •

7 AFFORDABLE AND CLEAN ENERGY

We enable energy solutions such as advanced biofuels and materials for solar panels, and support the quest for clean energy externally via our Bright Minds Challenge. We are significantly increasing the use of renewable sources of energy and are members of RE100. See also SDG13 (Climate Action). •••

8 DECENT WORK AND ECONOMIC GROWTH

We make a positive contribution to economic growth in the countries and markets in which we operate and strive to decouple growth from resource consumption. We support smallholdings through AIF and participate in economic development programs in developing countries. ••

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Bright Science is the key driver behind our sustainable, science-based solutions. Our innovation strategy supports the sustainable development agenda, with clear focus on several SDGs. ••

10 REDUCED INEQUALITIES

The DSM Inclusion & Diversity Strategy and aspirations promote the reduction of inequalities. Our Brighter Living Solutions program considers equal opportunities through People LCAs. Through AIF and economic development programs in developing countries we foster inclusive employment in local communities. ••

11 SUSTAINABLE CITIES AND COMMUNITIES

We support cross-sector partnerships and local philanthropic initiatives, such as our work with Global Health Corps. •

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

DSM-Niaga enables the manufacture of 100% recyclable carpets. Food waste can be reduced through solutions such as Pack-Age®. Advanced biofuels and bio-succinic acid replace fossil-fuel based alternatives. Our Brighter Living Solutions program considers the impact of our products throughout the value chain. •••

13 CLIMATE ACTION

We focus on reducing our own carbon footprint, enabling the low-carbon economy through renewable energy solutions and bio-based chemicals, and advocating climate action through partnerships such as CPLC and WEF and other initiatives. See also SDG7 (Affordable and Clean Energy). •••

14 LIFE BELOW WATER

Trevo nets support sustainable aquaculture. The Green Ocean partnership has the potential to transform aquaculture feed solutions into more sustainable systems and DSM is a partner of The Ocean Cleanup. ••

15 LIFE ON LAND

Our Brighter Living Solutions program values the reduction of land use as part of the LCA assessments. •

16 PEACE AND JUSTICE STRONG INSTITUTIONS

Our Anti-Bribery and Corruption policy and training programs, Human Rights Policy as well as our grievance mechanism 'DSM Alert', support ethical business conduct and good corporate governance within DSM. •

17 PARTNERSHIPS FOR THE GOALS

We partner with UN agencies, governments, academia, NGOs and industry peers such as WEF, WBCSD and SUN as well as many other global and local partners to accelerate our contributions to the other 16 SDGs. •••

DSM's engagement:

• = Minor •• = Moderate ••• = Major

The 17 Global Goals for Sustainable Development were agreed by more than 190 world leaders in September 2015. At DSM, we believe that companies have a crucial role to play in creating the impact needed at scale to achieve them.

Besides being our core value and a key responsibility, for many years we have made sustainability a real business driver for DSM, developing solutions, building partnerships and increasing our impact in key areas. Our Strategy 2018: *Driving Profitable Growth* emphasizes the focus we place on sustainability as our core value. Addressing the challenges of nutrition & health, climate & energy and resource scarcity drive our business and innovation strategies. We believe that our expertise in health, nutrition and materials position DSM well to actively contribute to the SDGs. While all the Goals are important, our capacity to support their individual achievement varies. The overview to the left provides an initial indication of where we see intersections between the SDGs and our company and business strategy. There are five SDGs on which we believe our company and its businesses can be most influential, and we expand on these on the right.

In order to achieve impact at scale and accelerate progress, DSM collaborates with multiple partners and stakeholders, in line with SDG 17 (Partnering for the Goals), including United Nations agencies, governments, academia, NGOs and peers. This enables us to address issues, develop alliances, create new metrics and foster new markets for sustainable solutions. Our partnerships range from the UN Global Compact, World Economic Forum (WEF), UN World Food Programme (WFP), UNICEF, the Carbon Pricing Leadership Coalition (CPLC), World Vision and Accounting4Sustainability (A4S) to the Dutch consulate in China, World Business Council for Sustainable Development (WBCSD), Scaling Up Nutrition (SUN) and our collaborations on Together for Sustainability (TfS) and Windpark Krammer.

SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

DSM works to improve nutrition via initiatives such as the Nutrition Improvement Program and Africa Improved Foods, providing fortified food solutions and micronutrient products, as well as through partnerships such as with WFP. We support the Base of the Pyramid with fortified food solutions and programs and provide micronutrients through products such as MixMe sachets. We continue to support the now independent nutrition think-tank, Sight and Life.

SDG 3: Ensure healthy lives and promote well-being for all at all ages

DSM's health, nutrition, biomedical and high-performance materials portfolios are geared to maintaining, protecting or regenerating health in all age groups (for example, by reducing salt and sugar levels in processed foods, or by reducing emissions associated with chemical manufacturing processes). Our First 1,000 Days Program supports mother and child health. We employ the DSM Life Saving Rules to protect our employees from harm and the DSM Vitality Program to promote awareness of good health and healthy living options among our employees.

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all
SDG 13: Take urgent action to combat climate change and its impacts

In partnership with RE100, we are increasing the use of renewables in our energy mix, reducing our carbon footprint. DSM enables solar and bio-based energy solutions and supports the move toward a low-carbon economy through solutions such as POET-DSM advanced biofuels and high-performance materials for solar panels. Our Bright Minds Challenge is identifying innovative solutions and new materials that will fast-track the movement toward 100% renewable energy. We advocate responsible action on climate change in combination with our stakeholders.

SDG 12: Ensure sustainable consumption and production patterns

DSM contributes to a bio-based, circular and low-carbon economy with products such as Akulon® oil pans and Arnite® car lighting. DSM-Niaga enables the manufacture of carpets that can be recycled, again and again. Food waste is reduced through DSM food solutions such as Pack-Age®. Bio-based chemicals such as bio-succinic acid replace fossil-fuel based alternatives in applications from packaging to footwear. Through our Brighter Living Solutions program we consider the impact of our products throughout the value chain.

Report by the Managing Board

Strategy 2018: *Driving Profitable Growth*

Over recent years, DSM has been transformed into a truly global company that provides innovative, sustainable solutions in health, nutrition and materials. DSM's Strategy 2018: *Driving Profitable Growth* focuses on capturing the potential of the business portfolio that has been created and translating this into improved financial results. In the period 2016-2018, we aim to step up our financial performance while pursuing our ambitions in the area of sustainability and expanding our positive impact on the world around us.

People, economies and markets worldwide are being affected by a number of fundamental societal trends. These megatrends – predominantly driven by demographic changes as populations grow (including a shift to the faster-growing countries in Asia and Africa) and people become older, more urbanized, wealthier and more connected – are exerting increased pressure on resources and the food chain. In addition they are engendering new patterns of consumption and impacting the environment. Moreover, there is increased attention to health and well-being. These trends present clear challenges, but also offer opportunities for DSM to profitably grow its businesses by supporting customers in developing science-based, sustainable solutions to meet current and future needs.

DSM's strategy and solutions offering addresses three crucial megatrends.

Global shifts and digital transformation

The accelerating growth of the global population, accompanied by ever more rapid technological advances and the increasing wealth of the emerging economies, is creating a world that is city-oriented, technology-literate, and globally connected. It is also imposing unprecedented demands on the earth's resources and triggering significant societal and cultural changes worldwide. Diets are changing and global spending on housing, transport, lifestyle and energy is on the increase. New technology, hyper-connectivity and big data are impacting individuals, communities, businesses and economies in unprecedented ways, bringing both opportunities and challenges.

Climate and energy

Scientific consensus on the link between human activity and climate change is clear, and the full and speedy implementation of the Paris Treaty (COP21) agreements is paramount. In the words of the *Marrakech Action Proclamation for Our Climate and Sustainable Development*, made at the COP22 UN Climate Change Conference in November 2016, "Our climate is warming at an alarming speed and we have an urgent duty to respond... Our task now is to rapidly build on that momentum, together, moving forward purposefully to reduce greenhouse-gas emissions and to foster adaptation efforts, thereby benefiting and supporting the 2030 Agenda for Sustainable Development and its SDGs." This understanding is speeding up the imperative transition to the (bio-)renewable age and the low fossil-carbon economy.

The DSM Managing Board (from left to right): Stephan Tanda, Dimitri de Vreeze, Feike Sijbesma (CEO/Chairman) and Geraldine Matchett (CFO)

Health and wellness
Advances in medicine, improvements in healthcare, and growing awareness of the importance of good nutrition have created favorable conditions for billions of people to achieve their full potential during the course of long and active lives. Yet these advances are accompanied by massive societal challenges: the growth of diet-related non-communicable diseases in both the developing and the developed world; the aging of the populations of Japan, Europe and North America, for example; and the increasing demand for – sustainable – animal protein in the emerging economies. At the same time, two billion people on the planet suffer from micronutrient and protein deficiencies, and the cycle of deprivation continues from generation to generation.

We provide our customers with the innovations and sustainable, science-based solutions they need to meet the demands arising from these megatrends. Orientating DSM's strategy and businesses around these three megatrends not only provides us with the global scope to pursue attractive commercial opportunities across the full range of our abilities. It also ensures that our efforts target some of the biggest challenges confronting society today.

Strategy 2018: *Driving Profitable Growth*

Two headline financial targets	High single-digit percentage annual Adjusted EBITDA growth	High double-digit basis point annual ROCE growth	
Clear actions identified to achieve targets	Businesses aim to outpace market growth in all segments	€ 250-300m cost reduction and efficiency improvement programs	Consistent improvements in capital efficiency
Additional items underpinning strategy	Stepping up sustainability aspirations	Global organizational and operational adjustments	Extract value from Pharma & Bulk Chemicals joint ventures

Taking into account these megatrends, and combined with disciplined focus on performance, we have established a three-year strategic plan with two headline financial targets: high single-digit percentage annual Adjusted EBITDA growth and high double-digit basis point annual ROCE growth. We have defined clear actions for DSM to achieve these targets, including outpacing market growth in our businesses, the rigorous execution of cost reduction and efficiency improvement programs which will deliver € 250-300 million in savings versus the 2014 baseline, and improvements in our capital efficiency. In support of our growth targets, we are adjusting DSM's global organizational and operating model to create a more agile, commercially focused and cost-efficient company.

We do not expect to engage in large acquisitions in the near future and intend to further monetize DSM's main joint venture partnerships in the coming years.

Besides improving the financial outcomes, we are also stepping up our sustainability aspirations with Strategy 2018, both in our own operations and in the positive impact we want to have on the world around us. DSM's competences and business plans have a strong link with the Sustainable Development Goals. While our activities align with many of the SDGs, our businesses can particularly contribute to SDGs 2, 3, 7, 12 and 13. We have identified key sustainability focus areas in which we foster the development of sustainable markets where our products, value chains, networks and partnerships can have a beneficial impact at scale. More information is given in 'DSM and the Sustainable Development Goals' on page 12 and throughout this Report.

Our ability to hire, develop, evaluate and manage our talented people is a fundamental strategic enabler for DSM's continued success, and we direct this through our People Strategy 2018.

"Our Strategy 2018 aims to unlock the tremendous potential that DSM's business portfolio offers, out-pacing growth in our markets through innovative solutions addressing important global issues, capturing the benefits of organizational optimization and helping our employees fully develop their skills and talents."

Philip Eykerman, DSM Executive Committee

While driving profitable growth throughout the company via the execution of our Strategy 2018, we continually monitor, assess and strive to respond appropriately to societal, macro-economic and segment-specific developments as they occur. Our approach to managing both opportunities and risks in DSM's businesses is embedded in our operating and governance model and risk management approach. For more information see 'Corporate governance' on page 93 and 'Risk management' on page 102.

A full description of Strategy 2018: *Driving Profitable Growth* can be found on the company website: www.dsm.com.

Progress in 2016

Having designed DSM's strategy update in 2015, the year 2016 has been about implementing Strategy 2018 in our organization and in our markets.

Financial results

DSM delivered very strong financial results in 2016, with net sales of €7,920 million, up 3% on 2015 (€7,722 million). Group organic sales growth came to 4% on the back of strong volumes in both Nutrition and Materials. Adjusted EBITDA from continuing operations grew by 17% to €1,262 million, clearly ahead of the high single-digit growth we are currently targeting.

DSM's overall Adjusted EBITDA margin (Adjusted operating profit before depreciation and amortization as a percentage of net sales) was 15.9% (2015: 13.9%). In 2016, Return On Capital Employed (ROCE) was up 280 basis points to 10.4% from 7.6% in 2015, also well ahead of our targeted improvement.

The Nutrition cluster had a strong year with 5% organic growth and Adjusted EBITDA up 13% versus 2015. All businesses contributed well to this growth. Adjusted EBITDA also benefited from the efficiency and cost saving programs. The Adjusted EBITDA margin was 18.0% (2015: 16.6%), already achieving the aspired range of 18-20% for 2018.

Animal Nutrition & Health had a very good year, with 8% organic growth, driven by strong volume growth in all regions with the exception of Latin America, due to the weak economic conditions in that region. Prices were up in a number of vitamins and premixes. Human Nutrition & Health delivered a significant step-up in organic growth versus recent years at 4% in 2016. This underlines the successful implementation of the strategy to drive above-market growth through new market initiatives and innovation. One of the highlights of the year was the continued rapid pace of growth for the i-Health range of dietary supplements. The range has proved its popularity in the US and is now also available in a number of other countries.

Our Materials businesses delivered a strong financial performance in 2016, reflecting the success of our differentiated approach of focusing on higher-growth specialty businesses in the Materials portfolio. Volumes grew 4% in the year. Prices were generally down across the Materials sector, including for DSM, as a result of the prevalent low input cost environment created by low oil prices. Adjusted EBITDA was up 13%, driven by strong volume growth in higher margin specialties, the benefits of the efficiency- and cost-saving programs that have been carried out in the cluster, and the support from low input costs. Margins in Materials came in at 17.3% for the year versus 15.2% in 2015. Even when normalized for the approximately one percentage-point of support resulting from the low input-cost environment, this is a significant step-up in profitability, and clearly well above the levels of just a couple of years ago and ahead of the mid-term aspiration of 15%.

Financial targets 2016-2018	Realization 2016
High single-digit percentage annual Adjusted EBITDA growth	**17%**
High double-digit bps annual ROCE growth	**280 bps**
Sustainability aspirations 2020	Realization 2016
Dow Jones Sustainability World Index	
Top ranking (RobecoSAM Gold Class)	Industry leader
Brighter Living Solutions	
65% ECO+/People+ (running business)	63%
GHG Efficiency Improvement	
40-45% (2008-2025)	23%
Employee Engagement Index	
Toward 75% favorable	71%
Safety	
0.25 Frequency Index of Recordable Injuries	0.33
Diversity	
25% Female executives	15%
60% Executives from under-represented nationalities	53%

From a regional perspective, in North America, economic growth remained steady, with record low unemployment. North America is the only region where all DSM's business groups and Emerging Business Areas (EBAs) have operations and sales grew by 10%. The pace of growth in the EMEA region remains patchy, with some countries and markets developing more strongly than others, influenced also by political events. Regional sales grew by 3%, with good performance in food & beverage and automotive alongside more robust conditions in building and construction.

Sales in emerging economies amounted to 44% of total sales in 2016, in line with 2015. This gives DSM a well-balanced global footprint, putting us in a position to capture opportunities arising from the megatrends in economies such as China, India, Brazil and Russia as well as in the more mature economies of the West.

In China, the economy is rebalancing toward the 'New Normal', whereby domestic consumption has become the most powerful driver of economic growth. Of relevance to DSM, 2016 saw high growth in automotive, and the food industry continued to develop well, while construction-related industries remained volatile. Environmental regulations have sharpened significantly in recent years, leading many segments to seek more sustainable substitutes for traditional materials. Sales in China grew by 6%. In India, GDP growth continued apace and DSM's sales showed a 16% development, supported by an increased awareness of the importance of healthy, balanced diets, and new standards that came into force for the fortification of staple foods. Sales in Latin America declined by 6%. Economic instability, especially in Venezuela and Brazil, and to a lesser extent in Argentina, continued to affect DSM's businesses in the region. At the same time, there is a growing willingness to address obesity and malnutrition by some governments in this region. The economy in Russia showed initial signs of improvement in 2016. A strong localization drive benefited agriculture in particular, which has been positive for DSM's animal nutrition business. Overall, sales in Eastern Europe were up 6%.

DSM's innovation strategy aims at developing the best, most sustainable and commercially viable solutions to continue to meet current and future market needs and to support DSM's further profitable growth. Innovative and improved products and solutions typically have above-average margins, contributing directly to Adjusted EBITDA growth as well as top-line growth. Innovation sales, defined as sales from products and solutions introduced in the last five years, made up 22% of total sales in 2016 (2015: 24%), in line with our aspiration to maintain a level of around 20% going forward for DSM as a whole. We see this as a healthy proportion in view of the overall balance of our product portfolio and product life cycles. R&D is crucial to the realization of DSM's innovation strategy, and most of the expenditure in this area is directed toward business-focused programs. The overall spend on R&D came to € 426 million in 2016, or 5.4% of sales.

Our three EBAs – DSM Biomedical, DSM Bio-based Products & Services and DSM Advanced Solar – continued to progress during the year. We saw solid volume growth in our Biomedical activities: worldwide, a medical device containing DSM's specialty biomedical materials is now being implanted into someone's body on average once every nine seconds. In Bio-based Products & Services, we have made strides together with our partner POET to bring the cellulosic bio-ethanol plant in the US toward full capacity. Furthermore, we are leveraging the expertise and the products we have built up to create new business in making the production of all generations of biofuels more efficient and sustainable. Our Advanced Solar business for solar energy materials again performed well in 2016, outpacing market growth. We also added an innovative new backsheet technology to our portfolio in this segment. Taken together, the EBAs delivered € 16 million in Adjusted EBITDA. DSM's Innovation Center reached Adjusted EBITDA break-even overall in 2016 as planned.

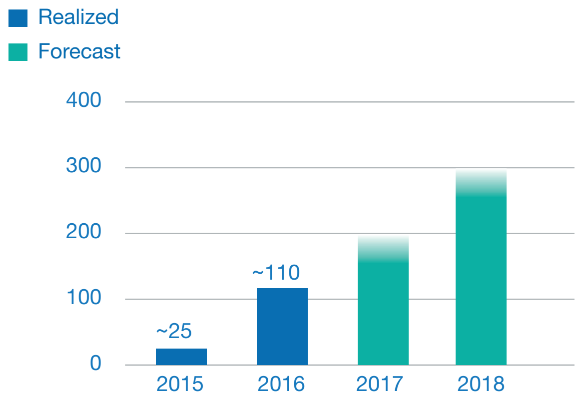
For detailed information on DSM's financial results in 2016, see 'Profit in 2016' on page 56. For more information on innovation and R&D, see 'Innovation Center' on page 82.

Cost reduction and improvement programs

DSM has instigated extensive cost-reduction and improvement programs which will deliver € 250-300 million savings versus the 2014 baseline. In 2016, all these well-identified programs progressed as planned and the programs are on track to deliver the targeted benefits.

Timing of cumulative costs savings*

(x € million)



* Versus 2014 baseline

Sustainability results

Sustainability is our core value. As such, we have expended much time and effort over the years in embedding sustainability across our business activities, both in recognition of our responsibility to reduce DSM's environmental footprint and in developing sustainability into a strategic and successful business growth driver. We harness our strong science competences to create and deliver higher-margin, profitable products and solutions that have a positive impact on our value chains and help address global challenges. In 2016, our Brighter Living Solutions comprised 63% of total sales. For more information on what makes our solutions different, see 'Brighter Living Solutions' on page 22.

We are proud that DSM was named the global leader in our industry group in the Dow Jones Sustainability World Index in 2016. This top ranking means that in 2017 DSM will continue to have RobecoSAM Gold Class status.

We have set targets to drive sustainable operations at DSM relating to greenhouse-gas and energy efficiency, employee engagement, safety and diversity. These headline targets with a longer-term horizon are supported by a wide range of measures. In 2016, we made good progress in reducing our operational environmental performance, improving both our greenhouse-gas and energy efficiency in the year toward the targets we have set. This included taking a significant step in the amount of electricity we purchased from renewable sources. To read about our aims and performance in detail, see 'People in 2016' on page 39 and 'Planet in 2016' on page 49.

We have defined three key focus areas in sustainability for DSM based on global societal trends that are affecting people, economies and markets. These are nutrition, climate & energy, and circular & bio-based economy.

- In nutrition, DSM has unique expertise in developing products to positively impact global nutrition, health and development in support of SDG 2 (Zero Hunger), which aims to end all forms of malnutrition by 2030. We work together with cross-sector partners to help make good nutrition aspirational, affordable and available to all. Our strategic partnership with the UN World Food Programme reached over 28 million beneficiaries in 2016. For more information, see 'Nourishing the Base of the Pyramid' on page 11 and 'Cross-sector nutrition partnerships' and 'Review of business – Nutrition' from page 36 and page 64 onwards respectively.
- Effectively tackling climate change is a responsibility and also a business opportunity. We focus on reducing DSM's own carbon footprint, enabling the low fossil-carbon economy with products and solutions and advocating climate action. In April 2016, our CEO Feike Sijbesma was named Co-Chair of the Carbon Pricing Leadership Coalition, which was launched by the World Bank and the International Monetary Fund in 2015. DSM also agreed to participate in a unique partnership for renewable energy from Windpark Krammer in the Netherlands. See 'Planet in 2016' on page 49.
- We are committed to securing the future availability of natural resources, and to unlocking more value from the limited resources that are available. At the end of 2016, the DSM-Niaga joint venture announced its readiness for commercial-scale production of 100%-recyclable carpets. For more information, see 'Review of business – Materials' from page 74 onwards.

We look to foster the development of sustainable markets in these areas where our products, value chains, networks and partnerships can have a beneficial impact at scale.

Organization & culture

The DSM Employee Engagement Index expresses how our employees rate DSM in terms of commitment, pride, advocacy and satisfaction. The survey held in 2016 resulted in an engagement index of 71% (2015: 69%), just ahead of the global standard of 70%. This is a good result, especially in light of our ongoing transformation to a new organizational and operating model. Our aim is for this outcome to move toward 75% favorable by 2020.

The members of the Executive Committee are the Managing Board members Feike Sijbesma (CEO/Chairman), Geraldine Matchett (CFO), Stephan Tanda (Nutrition) and Dimitri de Vreeze (Materials), as well as Chris Goppelsroeder (Nutritional Products), Philip Eykerman (Strategy and M&A), Peter Vrijsen (People & Organization) and Rob van Leen (R&D and Innovation)

We are well on track with the adjustments to our global organizational and operating model to support DSM's growth and create a more agile, commercially-focused and cost-efficient business. We strengthened DSM's management structure in 2015 by establishing an Executive Committee, which has enabled faster alignment and operational execution by increasing focus on the development of the business, innovation and people. The Executive Committee's efforts are primarily aimed at defining the overall strategy and direction; reviewing business results and functional and regional strategies; budget-setting; and people and organization.

Programs in our new target operating model to globally leverage cross-company support functions in areas such as HR, Indirect Sourcing, Communications, Finance, Legal and ICT are well underway. In support of this transformation, we continued to anchor and embed our new way of working and ONE DSM culture, driving changes in mindset and behaviors. The changes implemented are aimed at establishing DSM as a results-driven, high-performance organization.

We further embedded the DSM Leadership Model in our key processes of hiring, developing, evaluating and managing talent across the organization and for building high-performing teams. We also rolled out a new talent management approach across the company in 2016. We will continue to invest in our talent pipeline to ensure that we can sustainably address the future challenges and demands placed on us.

For more information about our organization and employees, see 'People in 2016' on page 39.

Extracting value from our partnerships

DSM has established joint venture partnerships for its former pharma activities (DSM Sinochem Pharmaceuticals and Patheon) and for the remaining bulk chemical businesses (ChemicalInvest). These partnerships have been created with a view to ultimately exiting and monetizing these businesses, and we expect to extract significant value from them in the coming years.

We took a first step in 2016 with the sale of 4.8 million ordinary shares in Patheon N.V. in connection with the IPO of Patheon N.V. in July, resulting in a gain of €232 million. Following this transaction, DSM now holds approximately 48.7 million ordinary shares, or approximately 34% of Patheon N.V. For more information, see 'Partnerships' on page 88.

Building for earnings growth beyond 2018

DSM has set itself strategic targets for the period to 2018. This shorter three-year period is intended to channel the organization's focus and forcefully drive achievement of the step-up in financial performance at which the company aims, creating more value from the promising portfolio we have built over recent years. At the same time, we are also preparing for further longer-term growth; DSM's business cycles are typically longer than the three-year period to 2018. The company has a range of key business and innovation projects across the clusters that will drive earnings growth beyond 2018 and we will continue to develop more initiatives in light of market dynamics.

How DSM creates value for its stakeholders

Capital inputs

People

- Employees
- Training & development
- Stakeholder engagement & Public-Private Partnerships
- Philanthropy & sponsoring

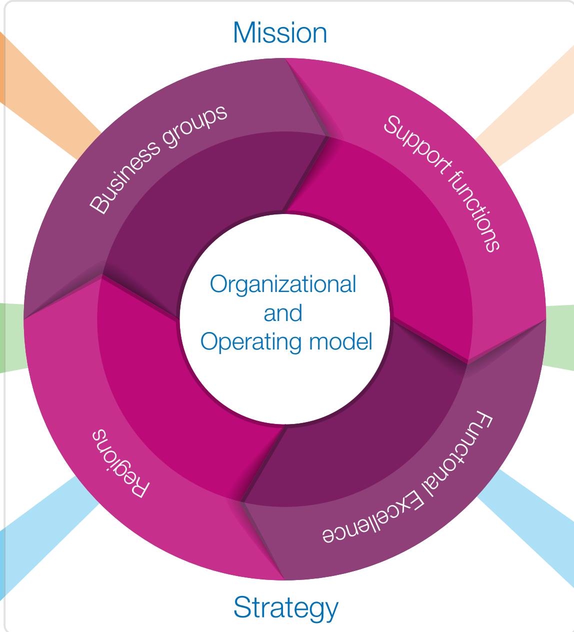
Planet

- Raw materials (including renewables)
- Energy (including renewables)
- Water

Profit

- Shareholder equity
- Borrowings
- Partnerships & open innovation
- Purchased goods & services
- Manufacturing asset base

DSM's business



Value outcomes

People

- Safety & health
- Brighter Living Solutions
- Engaged workforce
- Skills & employability
- Employee benefits
- Improved nutrition

Planet

- Reduced environmental footprint
- Brighter Living Solutions
- Enabling transition to (bio-) renewable & circular economy
- Safer ingredients & materials

Profit

- Financial performance (Adjusted EBITDA & ROCE growth)
- Dividend
- Contribution to business success for customers & suppliers
- Contribution to civil society via tax
- Patents & royalties

Human capital

DSM employs skilled and talented people from diverse backgrounds. DSM strives to provide employees with a safe and inspiring workplace as well as with the tools and training they need to be effective and to develop their abilities. DSM rewards employees with competitive benefit packages.

Societal & relationship capital

DSM engages with various stakeholders to ensure close alignment between the company's aims and societal needs. DSM generates value for stakeholders outside its direct value chains of employees, suppliers, customers and end-users; these include employees' families, governments, local communities and civil society.

Natural capital

DSM recognizes that the world is an interconnected system of resources. For DSM this represents a responsibility and a business opportunity. DSM aims to reduce the environmental impact of its supply chain, operations and products and services, while developing innovative solutions that deliver sustainability benefits to customers and beyond.

Financial capital

Providers of capital – shareholders and bondholders, banks and the financial markets – supply funds that DSM uses in its business to create value, driving growth and delivering sustainable returns.

Impact

- Better fed & healthier individuals and communities
- More prosperous and resilient employees for the company and in its value chain

- More sustainable use of resources, for the company and in its value chain
- Products that contribute to safer, healthier working & living environments

- *Driving Profitable Growth* through science-based sustainable solutions
- Sustainable returns to investors
- Positive contribution to economic growth in the countries & markets in which DSM operates

SDGs

Intellectual capital

DSM manufactures and distributes high-quality products and services safely, efficiently and responsibly and strives to develop valuable, collaborative and long-term relationships with customers and suppliers. DSM pursues open innovation, connecting and collaborating with partners and investing in start-ups.

Manufactured capital

DSM has unique competences in life sciences and materials sciences and connects these to deliver innovative solutions that nourish, protect and improve performance.

DSM's strategy is aimed at driving profitable growth through science-based, sustainable solutions based on the defining megatrends of our time. By using its unique competences in health, nutrition and materials, DSM is fostering economic prosperity, environmental progress and social advances to create value for all stakeholders simultaneously.

The diagram on the left is based on the International Integrated Reporting Council's Integrated Reporting <IR> framework and gives a schematic overview of the value DSM creates over time based on six capitals. These are: human capital; societal & relationship capital; natural capital; financial capital; intellectual capital; and manufactured capital. Descriptions of how these capitals apply to DSM are given below left.

DSM employs these capital inputs in its business in the execution of its strategy and in the fulfilment of its mission to create brighter lives for people today and for generations to come. The company's organizational and operating model is made up of market-facing business groups focused on the primary business functions (Innovation and R&D, Direct Sourcing, Manufacturing & Operations and Marketing & Sales), global support and functional excellence departments, and regional organizations. It uses these to minimize and mitigate risks and to take advantage of the opportunities the megatrends provide, thereby transforming the capital inputs into value outcomes aimed at having the most beneficial impact possible.

There is a strong link between DSM's competences and business plans and the Sustainable Development Goals. While our activities align with many of the Goals, we can particularly contribute to SDGs 2, 3, 7, 12 and 13. For more information, see 'DSM and the Sustainable Development Goals' on page 12.

Since 2002, DSM has established a track record in Triple P reporting, disclosing its performance in terms of People, Planet and Profit. For the purposes of comparability, the six capitals as defined in the <IR> framework continue to be clustered under People (comprising the human and societal & relationship capitals), Planet (natural capital) and Profit (financial, intellectual and manufactured capitals).

Specific performance indicators relating to the capitals are provided throughout this Report.

Brighter Living Solutions

In 2016, DSM launched the 'Brighter Living Solutions' program in order to steer products and innovations that are better for people and the planet. The program combines DSM's ECO+ and People+ programs to drive focused growth and develop sustainability into a strategic and successful growth driver. Brighter Living Solutions create shared value for DSM's stakeholders and differentiate DSM through their positive impact on society and the environment.

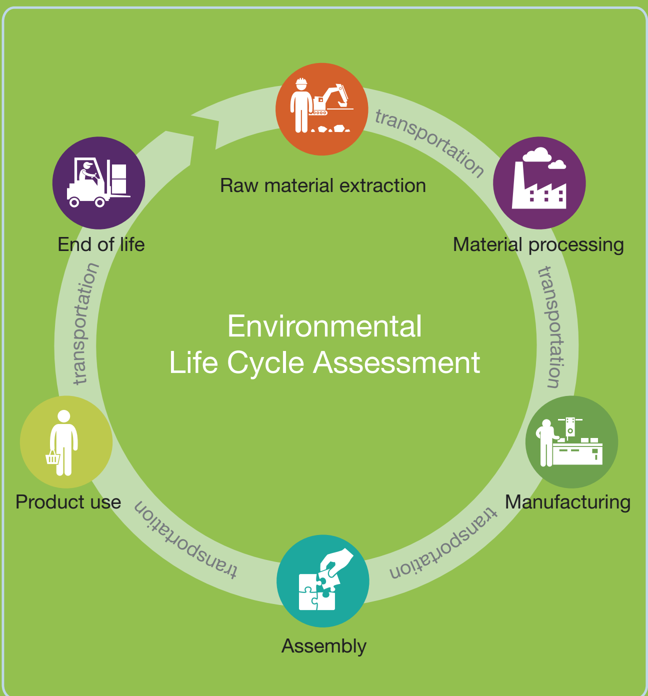
The impact of Brighter Living Solutions can be created at any stage of the product life cycle, from raw materials through the manufacturing process to potential re-use and end-of-life disposal. DSM uses comparative Life Cycle Assessments (LCAs) and/or expert opinions to determine whether a product can be identified as a Brighter Living Solution. Within the program, DSM also conducts a yearly 'Product Category Sustainability Review' for all our products. This review identifies environmental and social impact differentiators for each of our product categories and confirms minimum compliance levels.

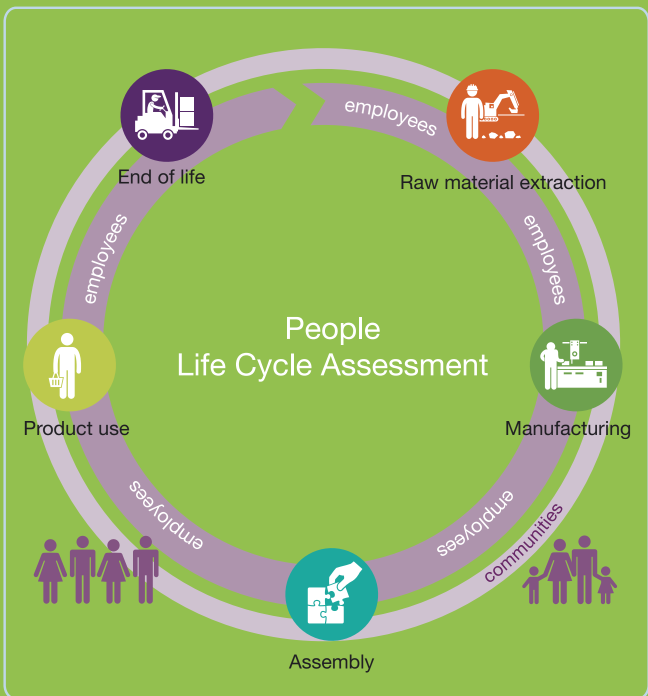
ECO+

With ECO+ DSM strives to drive innovations and products with a better impact on the planet. Products qualify as ECO+ when their environmental impact is lower than* the main competing solutions in the market as shown with comparative and standardized Environmental LCAs and/or expert opinions. ECO+ solutions provide impact along at least one of five value drivers of environmental sustainability: resource and land use, water and energy consumption and emissions.

People+

People+ provides guidance to develop solutions that measurably improve the lives of consumers, employees and/or communities across value chains compared to the main competing solutions, as demonstrated by means of comparative DSM People LCAs and/or expert opinions. Examples of People+ drivers that improve people's lives are health condition, comfort & well-being, working conditions and community development.





* For a small percentage of total Brighter Living Solutions (<3% out of 63%), the environmental impact is considered 'best in class' together with other solutions.

Maxarome®

Maxarome® is a food ingredient used in soups and sauces. It is a salt replacement ingredient that maintains great flavor in food. Reducing salt intake is one of the easiest ways to reduce high blood pressure and risks for stroke and cardiovascular diseases.

Uralac® Ultra

Uralac® Ultra technology provides coating solutions for furniture that gets heavy-duty use. Think about kitchen and bathroom cabinets, office and children's furniture exposed to moisture and daily wear. Uralac® technology uses less water and energy throughout the life cycle than comparable alternatives, which makes it the preferred solution from an environmental viewpoint.

Dyneema® heavy marine ropes

One of the applications of high-performance Dyneema® fibers are ropes for mooring and towing tankers and other ships. This includes cruise ships and very large cargo vessels. The strength and durability of the Dyneema® fiber enables ropes that are up to 30% lighter compared to polyester, resulting in reduced emissions and making them easier to handle than traditional alternatives made of steel wire.

Pack-Age®

Pack-Age® is a moisture-permeable membrane that allows cheese to ripen naturally. It replaces conventional cheese ripening methods such as coatings without any need for additional preservatives. It also prevents cheese losses during the ripening time and processing of cheese. More cheese can be ripened and further processed than with alternative solutions.

Stakeholder engagement

Engaging in strategic and proactive dialogue with our key stakeholders helps deepen our insights into the drivers of our business and the needs of society worldwide, and thus to be ahead of the competition in adapting to changing demands.

We value engaging with our stakeholders – customers, suppliers, investors, employees, companies, governments, academia and civil society – and reach out to them in order to maintain open discussions on topics relevant to our business activities and our role in society, and to align our strategy with their views. These groups have been identified based on their influence on DSM's operations, as well as our effect on them. The outcomes from the various stakeholder dialogues inform many aspects of our strategy, such as risk management, the identification and pursuit of business opportunities, and the overall guidance of DSM's strategic objectives and ambitions. Continuous dialogue with our stakeholders is pursued through a variety of channels. A non-exhaustive overview of our engagements with stakeholder groups is provided under 'Stakeholders' on page 29 below.

Materiality

For DSM, materiality is about identifying the People, Planet and Profit topics that are most relevant to our stakeholders, and plotting these against the impact they have on our business. Business impact includes social, environmental, financial and reputational impact.

While material topics do not change substantially year-on-year, we consider it important to understand the views of both our internal and external stakeholders so as to verify whether we need to change our position on various issues. We announced our strategy update at the end of 2015, which was based on engagement with internal and external stakeholders. Our priority in 2016 was therefore to ensure that our materiality matrix was aligned with DSM's Strategy 2018. The material topics from 2015 were challenged using a media and peer analysis process to capture emerging trends and headlines and to assess their alignment with DSM's strategy and our Issues Management list. This procedure was supplemented by interviews with the Executive Committee aimed at identifying emerging trends, new topics, and changes in the relevance or priority of existing topics. The materiality matrix and the Corporate Risk Assessment were compared to confirm that all relevant subjects were covered from a materiality and/or risk perspective. The results of this exercise were validated by the Sustainability Leadership Team – a group of senior managers responsible for championing sustainability at DSM – and ultimately signed off by the Managing Board.

Changes in 2016

Two new topics for scrutiny were identified by this process in 2016: Digital transformation, and Geopolitical tensions & inequalities. The thematic areas Sustainable & Circular value chains, Bio-based economy and Sharing economy have been combined into a new category, Resource scarcity/Circular & bio-based economy.

Materiality matrix

Society

1. Health & wellness
2. Malnutrition & nutrition security
3. Emerging economies
4. Geopolitical tensions & inequalities

Business enablers

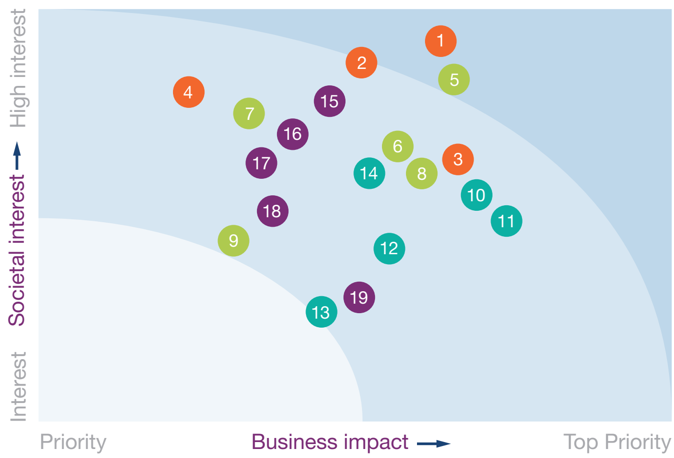
10. Open innovation
11. Careers & employment
12. Advocacy & reputation
13. Trade barriers
14. Digital transformation

Environment

5. Climate change & renewable energy
6. Resource scarcity/ Circular & bio-based economy
7. Water security
8. Sustainable food systems
9. Biodiversity

Governance

15. Responsible business practices
16. Transparency & reporting
17. Product & food safety
18. Taxation
19. Bioethics



Transparency has been renamed Transparency & reporting, Tax has been renamed Taxation, and Sustainable animal proteins has been renamed Sustainable food systems so as to include the climate impact of agriculture and sustainable alternative protein sources. Malnutrition & nutrition security now also encompasses overweight/obesity resulting from unhealthy diets.

Three of the four categories have been adjusted, with Societal shifts renamed Society, Eco Limits renamed Environment, and Trust & Accountability renamed Governance. Business enablers remains unchanged. Product & food safety has been moved to Governance. All topics are reported on, and our management approach explained, on the following pages.

Society

Health & wellness

The world's population is simultaneously growing and aging. We contribute to individual health & well-being, the prevention and/or reduction of diseases, and the enhancement of the quality of life through the offerings of our Nutrition, Materials and Biomedical businesses. We respond to discussions about healthy diets (including associated health risks and claims) and to the shift in consumer preferences (such as organic) through the management of our nutrition, food and personal care ingredients portfolio. We also see that a growing consumer preference for less processed products could pose a risk to our business. This topic aligns with SDG 3 (Good Health).

Management approach. Our Nutrition strategy targets trends in health & well-being and shifts in consumer diets, including reduced salt and sugar, and 'free from'. Within our Biomedical Emerging Business Area (EBA), we partner with the medical industry to address health, disease and quality of life. In Materials, we focus on the elimination of hazardous substances in our value chains, contributing to improved human health. Within our own operations, we recognize our employees' need for a safe and healthy working environment. See 'Strategy 2018' on page 14, 'People in 2016' on page 39 and 'Review of business in 2016' on page 62.

Malnutrition & nutrition security

The cost of malnutrition – in both human and economic terms – is vast. For DSM, malnutrition includes undernutrition resulting from the insufficient intake of micronutrients (vitamins and minerals) and overweight/obesity resulting from unhealthy diets. Nutrition security means access to food that is both calorifically and nutritionally sufficient to foster health & well-being. We have been developing and piloting affordable, nutritious food solutions together with the UN World Food Programme (WFP) and other partners for over ten years. We are now in the position to scale up some of these approaches through new business ventures. We are also growing our portfolio of 'substitute' food ingredients to address unhealthy diets (for example, yeast extracts as a replacement for salt and developing fermentative stevia as a replacement for sugar). This topic aligns with SDG 2 (Zero Hunger).

Management approach. Cross-sector partnerships with UN agencies, governments and NGOs co-create food solutions in the developing world. The strategy and products of DSM Nutritional Products and DSM Food Specialties provide nutrition and food solutions in emerging markets as well as the developed world. See 'Cross-sector nutrition partnerships' on page 36, 'Nourishing the Base of the Pyramid' on page 11 and 'Review of business – Nutrition' from page 64 onwards.

Emerging economies

The emerging economies, which continue to grow in influence, represent 80% of the global population and are seeing profound economic transformations that are leading to an unprecedented rise in urbanization. We see opportunities to improve lives in emerging markets through our Brighter Living Solutions as well as through our operations and supply chains. We aim to have a positive social impact on local communities through our respect for human rights, our insistence on fair working conditions and our inclusive approach to business.

Management approach. DSM manages its regional approach and performance through its Strategy 2018: *Driving Profitable Growth*. Our operational and organizational model addresses regional dynamics. Through our Human Rights Policy and Supplier Sustainability Program, we strive to ensure that our value chain is sustainable. See 'Supplier Sustainability Program' in this chapter and 'Human Rights' on page 47.

Geopolitical tensions & inequalities

Unchecked tensions and inequalities could jeopardize economies, societies and communities, undermining efforts to achieve the SDGs. We monitor these macro risks, including trade and regulatory uncertainty, terrorism, political violence, and the threat of global recession, as they are relevant to our efforts at both short- and long-term value creation. This topic warrants inclusion due to its potential impact should tensions and inequalities heighten. The year 2016 was characterized by political uncertainty; any impact on global markets from developments such as Brexit will only become apparent in time.

Management approach. We address the potential impact of this topic through stakeholder engagement activities (such as the World Economic Forum (WEF), the UN Global Compact (UNGC) and the Dutch Sustainable Growth Coalition). Corporate Risk Management also monitors developments in this area. See 'Risk management' on page 102.

Environment

Climate change & renewable energy

Recent international agreements highlight the global urgency of this topic. The 'COP21 agreement' to limit the impact of climate change to less than 2°C on average is legally binding and has been agreed by over 190 nations.

Observable changes such as the loss of sea ice, the accelerating rise in sea levels, and longer and more intense heat waves are already making themselves felt. We see tackling climate change as both a responsibility and a business opportunity. We are focusing on reducing our own carbon footprint through initiatives including increasing our use of renewable energy; enabling the low-carbon economy by driving innovations in upstream and downstream low-carbon solutions; and advocating action on climate in an appropriate manner by engaging in discussions on topics such as carbon pricing. This topic aligns with SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action).

Management approach. We monitor metrics that impact on Climate change & renewable energy in the DSM Responsible Care Plan. Through the activities of our Materials and Advanced Solar businesses, we contribute solutions that are lighter, more durable, better-performing and have lower carbon footprints. Our engagement with stakeholder groups and climate advocates such as UNGC, the Carbon Pricing Leadership Coalition (CPLC) and RE100 influences public discourse on this topic. See 'Sustainable food systems' below, 'Planet in 2016' on page 49 and 'Review of business - Nutrition' and 'Review of business - Materials' from page 64 and page 74 onwards respectively.

Resource scarcity / Circular & bio-based economy

We support the move toward a circular, bio-based and sharing economy in response to growing resource scarcity. We see opportunities to innovate in both product and system design, and to investigate lower-impact business models, including sharing models that emphasize reusability, renewability and recyclability. This approach is most relevant to our Materials businesses; however, we also see opportunities to strengthen our work on nutrition security with circular concepts. This aligns with SDG 12 (Responsible Consumption and Production).

Management approach. We have identified the circular and bio-based economy as a sustainable growth area and will focus attention on opportunities in this area. The strategy and portfolio of our EBA DSM Bio-based Products & Services and new business ventures (such as DSM-Niaga) directly address this topic, which is a key driver in our Materials strategy and portfolio. See 'Planet in 2016' on page 49 and 'Review of business - Materials' and 'Review of business - Innovation Center' from page 74 and page 82 onwards respectively.

Water security

The issue of water security is playing an ever-more important role in the global development agenda. Due to the nature of our business, water availability and water quality represent a fundamental operational and reputational business risk for DSM. We established a context-based water target in 2015 to acknowledge that water issues are usually local or regional in nature. Our focus on sites in regions of water scarcity and sites that have a relatively high groundwater consumption or waste water discharge will ensure that appropriate measures are taken at site level.

Management approach. We are committed to the responsible use of water resources. The DSM Responsible Care Plan guides our approach to water. DSM is a signatory to the UN CEO Water mandate, and we voluntarily disclose our policy and performance on water as part of the Carbon Disclosure Partnership. Brighter Living Solutions and our Supplier Sustainability Program address this topic in the value chain. See also 'Planet in 2016' on page 49.

> DSM supports the UN CEO Water Mandate
>
> "Water security for the world's growing population is a global concern. Many areas in the world are facing water scarcity and pollution, as well as damage from natural disasters. Individual and collective actions are necessary to mitigate the adverse effects on water quality and availability. For DSM, the sustainable management of water within our own operations and along our value chain is a material topic. Thus we truly value initiatives such as the UN Global Compact CEO Water Mandate and its principles, and commit to reporting annually on our progress through this Report."
>
> Feike Sijbesma, CEO/Chairman Managing Board

Sustainable food systems

As the global population continues to grow and a large proportion of mankind remains poorly nourished, the pressure on food systems to deliver more food and better nutrition is immense, causing in turn enormous environmental pressure. As a leading player in nutrition, we see it as our responsibility to help the world move toward more nutritious and sustainable food and feed solutions. This topic aligns with SDG 2 (Zero Hunger).

Management approach. Our Animal Nutrition & Health portfolio for the feed sector and new opportunities in sustainable plant proteins address this topic through products such as Clean Cow and the Green Ocean partnership. We also address the issue of food waste through our innovative packaging solutions and our food ingredient portfolio, which can increase the shelf-life and processing efficiency of certain foods. We pro-actively engage with relevant stakeholders on initiatives concerning this topic. See 'Brighter Living Solutions' on page 22 and 'Review of business - Nutrition' from page 64.

Biodiversity

Diverse and healthy ecosystems are among the preconditions for a sustainable world. The variety of life on earth and the patterns of the natural world can influence the supply of ecosystem services such as food, water, and clean air. We believe that maintaining healthy ecosystems is important from both an operational and a reputation management perspective. The Natural Capital Protocol was launched in 2016. The protocol defines how companies can identify, measure, and value natural capital in a standardized way into business decisions and risk management.

Management approach. The DSM Responsible Care Plan outlines how we monitor and assess the impact of our operations on protected areas within our vicinity. We are exploring natural capital concepts via the Natural Capital Protocol development pilot to prepare for incorporating these into our future decision-making. We comply with the Convention on Biological Diversity protocols, which stresses the interconnection between biodiversity and climate change. Our position paper on biodiversity can be found on the company website. See also 'Planet in 2016' on page 49.

Business Enablers

Open innovation

Open innovation helps companies to counter increasing competitive pressures and ever-shorter product life cycles. Companies that embrace it typically grow more quickly and generate more sales than their competitors. We see many opportunities to be gained from combining our own capabilities with the vast pool of ideas, know-how and expertise that are available outside DSM. Open innovation supports our sustainable growth areas and sustainability commitments and allows us to work together with suppliers, customers and other partners to create new solutions in a collaborative way. We see the role that open innovation and new technologies can play to help the world to deliver on the SDG commitments. For example, we are currently drawing on the knowledge of scientists around the world to scale up renewable energy solutions through our Bright Minds Challenge.

Management approach. DSM approaches innovation as a growth driver in Strategy 2018: *Driving Profitable Growth*. The DSM Innovation Center uses partnerships, funding and crowd sourcing to foster open innovation. See 'Review of business - Innovation Center' from page 82.

Careers & employment

We aim to provide rewarding career opportunities, high levels of employee engagement, a healthy work-life balance, and a diverse workforce in which individual differences are respected. We follow trends in careers & employment to adapt our organization to changing needs, so as to unlock the full potential that the right employees can make to our company, and to ensure that our employee base continues to match DSM's capability requirements as these evolve over time.

Management approach. Our HR strategies and policies prepare for changes such as the increasing age of the world's population and the growing use of technology. We apply the International Labour Standards of the International Labour Organisation. Lastly, we address the issue of fair pay in our supply chain through our Supplier Sustainability Program. See 'Suppliers' in this chapter and 'People in 2016' on page 39.

Advocacy & reputation

Companies are increasingly asked to define how they are contributing to a better world, and business leaders are increasingly becoming advocates on critical issues. For DSM, advocacy means interacting with government, policymakers, industry associations and societal interest groups on topics of mutual interest to create a receptive environment for the solutions we offer. We encourage legislators to promote competitiveness, sustainability and innovation.

Management approach. Our reputation underpins our license to operate with stakeholders both within and beyond our direct value chains. We are a vocal advocate on policy issues including action on climate change, malnutrition & nutrition security, and the circular economy, as these topics are of particular relevance to our strategy and our sustainable growth areas. We actively manage our sustainability profile, and ensure that we take care of our own operations (for example, regarding emissions and pollution), in order to support our reputation as a sustainable company. See also 'Stakeholders' in this chapter.

Trade barriers

This topic is closely linked with 'Geopolitical tensions & inequalities'. DSM actively follows international geopolitical developments and the consequences for the trade barriers affecting its operations, which include import and export trade controls, legislation on strategic goods, sanctions and embargoes, sanctioned parties, restricted chemicals, and technology controls. During 2016, the options linked to the entry into force of the Joint Comprehensive Plan Of Action were elaborated. Other lifted sanctions opened new market possibilities, while additional sanctions imposed on conflict areas have not affected DSM yet.

Management approach. The DSM Code of Business Conduct defines the core of our approach to this topic. Through our Supplier Code of Conduct and contracting practices, we manage this topic in the Supply Chain. Trade Control Compliance is managed through our standard business processes.

Digital transformation

Digital transformation is a megatrend that will profoundly change the way companies operate in years to come. For DSM, this change is seen in three main areas: manufacturing, marketing & sales, and careers & employment. Digital transformation is also expected to disrupt many of our end-markets, such as health and automotive. Within health, the opportunities for patient engagement through precision medicine and medical printing will change the way the health profession operates. In automotive, assisted driving or self-driven vehicles represent the future. The rise of 'big data' brings with it business opportunities and risks (such as privacy and cyber security).

Management Approach. The digital transformation is identified in DSM's Strategy 2018: *Driving Profitable Growth* as one of the megatrends to which we are responding. Big data is being developed as a competence in the R&D and IT disciplines that support our business and functional needs. Our Privacy Policy and Information Security Office work to protect our information assets.

Governance

Responsible business practices

Doing business in a responsible way, and complying with the many relevant laws and regulations, provides us with the license to operate in our dynamic, international environment. Responsible business practices cover a wide category of subjects including corporate governance, human rights, labor policies, Safety, Health and Environment (SHE) practices, competition law compliance, trade controls, anti-bribery & corruption measures, and privacy.

Management approach. Our approach to this topic is covered in our Code of Business Conduct and, for the supply chain, our Supplier Code of Conduct and Supplier Sustainability Program. Our Human Rights Policy, due diligence practices and HR policies cover the People-related aspects of this topic. See 'Suppliers' in this chapter and 'People' and 'Code of Business Conduct' on page 39 and page 98 respectively.

Transparency & reporting

We transparently report to meet the needs of diverse stakeholders, such as employees, customers, investors, governments, civil society and local communities on topics including tax payments, disclosures on the environmental and social impacts of our solutions, and remuneration of the Managing Board. The year 2016 saw increasing investor requests concerning climate disclosure and customer requests for additional supplier information, especially concerning human rights, as well as expectations on a global scale for reporting on our contribution to the SDGs.

Management approach. We address this topic through the publication of an Integrated Annual Report (published since 2010) and the annual Corporate Social Responsibility (CSR) report in China (published since 2007). The application of financial and non-financial reporting guidelines and disclosures such as IFRS, GRI and CDP and ranking in investor questionnaires and indices such as the Dow Jones Sustainability World Index (DJSI) foster external confidence in our approach.

Product & food safety

Product & food safety is highly relevant to DSM as an operational and reputational business risk and provides excellent opportunities to differentiate our product offering. The risks include the potential negative impact of product recalls, product contamination, health risks related to nanotechnology during handling, for instance, and regulatory restrictions.

Management approach. This topic requires us to have practices in place to ensure ingredient and substance quality, and covers the production, handling, preparation, storage and use of DSM solutions in ways that prevent risks to health & wellness. We see opportunities for differentiation with our management of Product & food safety through our Brighter Living Solutions program and Product Stewardship strategy. See 'Brighter Living Solutions' on page 22 and 'Product Stewardship' on page 54.

Taxation

In 2016, corporate tax avoidance figured once more in the news headlines, and civil society continues to press for corporate tax transparency and reform. We believe that a responsible approach to tax is integral to business sustainability. We view the fulfilment of our tax obligations as part of the process of creating long-term value for all our stakeholders.

Management approach. Our tax position is consistent with the normal course of our business operations and reflects our corporate strategy as well as the geographic spread of our activities. DSM strives to be compliant with the letter and spirit of national and international rules, regulations and best-practice guidelines (such as the OECD Guidelines for Multinational Enterprises) and operates in line with the arm’s length principle.

DSM supports the idea of a global solution for fair tax policies and systems. We therefore closely monitor and provide input on the OECD initiative on Base Erosion & Profit Shifting. DSM is transparent toward tax authorities in all the countries in which it operates, and works closely together with them to determine the amount of tax due.

DSM’s contribution to society includes the provision of employment to more than 20,000 people around the world. In addition to corporate income taxes, the company pays many other taxes, including payroll taxes and social security contributions on the wages of its employees, value added taxes, customs duties, property taxes, etc. All these taxes are a significant source of funding of public services by governmental institutions at several levels worldwide. DSM sees it as its responsibility to contribute to this.

Our Managing Board is responsible for establishing the company's approach to taxation under the supervision of the Audit Committee of the Supervisory Board. Proper organization, procedures and processes are in place at DSM between Group Taxation, the business, and other support functions and functional excellence departments. The aim is to create a strong interconnection in order to keep everyone aware of relevant tax legislation and to ensure compliance. Compliance with both direct and indirect tax matters is monitored through a Tax

Control Framework in order to achieve an effective, efficient and transparent tax function. The Tax Control Framework is a tax risk management and control system which ensures that Group Taxation is aware of the worldwide tax risks for the company. Group Taxation possesses sufficient insights to adequately manage these risks. The key stakeholders in the Tax Control Framework are well established and include the Supervisory Board, Managing Board, Executive Committee, Group Taxation, business, external auditors, as well as the tax authorities in countries where DSM is operating. For further detailed information, see 'Taxation at DSM' on the company website.

Bioethics
New or unfamiliar technologies can trigger ethical discussions about their implications for public health or the environment. Consumer acceptance of new technologies cannot be taken for granted, so addressing safety and other potential concerns is a top priority for us. We firmly believe that biotechnology can offer unique solutions to global challenges related to the world's growing and aging population and the depletion of fossil resources. Our latest consultations with stakeholders show that the debate now focuses on the role Genetically Modified Micro-organisms (GMMs) might be able to play in nourishing the world's population by 2050.

Management approach. We manage this topic through active consultation with the scientific community, industry, NGOs, governments and the general public. Our safety assessments are science-based and transparent, enabling authorities to fairly assess and approve our innovative technology and resulting GMMs. DSM uses GMMs as tools for the manufacture of a range of products. DSM does not sell GMMs or products containing GMMs. All GMMs are contained within our production processes. See also our position paper on biotechnology on the company website.

Stakeholders

DSM's various stakeholders – both those within our value chain such as suppliers and customers, and those that influence our business operations, such as investors, governments and civil society – have thoughts and views that must be balanced against our own strategic objectives and focus areas.

We appreciate the open dialogue we have with our stakeholders through a variety of channels. It equips us to respond to the needs of society and to create shared value for all our stakeholders.

In the following pages, we present how DSM engages with external stakeholders, including the partners in our value chain. Information on how DSM engages with its own employees can be found in 'People in 2016' on page 39.

Partners in the value chain

Customers
Customers drive our business. They are our most important partners for realizing both our strategic growth ambitions and our vision to improve the lives of people today and for generations to come. Customers buy our solutions to create consumer-facing products, or to distribute our own consumer products through their various channels.

We do our utmost to strengthen DSM's commercial and strategic relationships with customers. We work together to provide the solutions they are seeking while offering them an exceptional customer experience. Our customer-centric approach is manifested in various ways:

- To meet individual customer demands, we apply customer segmentation to ensure that value propositions and service levels are in line with our customers' strategic ambitions.
- Developing consumer insights together with our customers is crucial for driving new business developments that meet consumer needs. For example, DSM Personal Care has developed a new methodology that enables the personal care industry to visualize the effectiveness of facial skin moisturization and helps it to demonstrate and test the effectiveness of its skin products. The new method came about through our epidermal science platform CORNEOCARE™, in cooperation with partners from industry and academia.

Stakeholders

External stakeholder group	How DSM engages	Examples of engagement 2016
Investors - DSM aims to provide an attractive financial return for our shareholders	Annual General Meeting, Capital Markets Day, conference calls, roadshows, investor indices (e.g. DJSI, Sustainalytics), surveys	- In September, DSM organized an Investor day in Charleston (South Carolina, USA) to give US-based investors deeper insights into the underlying growth and earnings profile of the company's Nutrition and Materials businesses. - DSM engaged in dialogues with investors and their representatives on topics such as climate strategy, social supply chain management, natural capital and responsible taxation, which helped foster mutual understanding around respective sustainability focal points.
Scientific research institutions - DSM openly collaborates with renowned universities and science institutes	Financial support, knowledge & research, sharing facilities, lectures	- DSM broadened its biotech engagement, becoming a member of both the Engineering Biology Research Consortium and the MIT- Broad Foundry in 2016. In Materials, engagement in the year included the Materials Research Laboratory/Complex Fluids Design consortium of the University of Santa Barbara (California, USA), and the iPrime consortium of the University of Minnesota (Michigan, USA). - DSM was the innovation partner of the 2016 Sasol Solar Challenge-winning Nuon solar car, and we supported the Dutch-based team with our light-trapping technology.
NGOs and civil society - DSM works together with other organizations to jointly find solutions to societal challenges	Meetings, discussion panels, philanthropic events	- In India, in partnership with the Indian Academy of Pediatrics, HealthPhone and Vodafone, DSM launched the Poshan cards program. The program supports the Indian Government's mission to combat malnutrition and micronutrient deficiencies among mothers and children by providing information to pregnant and lactating women. This unique public-private partnership uses technology as an enabler and is expected to positively impact the lives of more than 1.5 million women.
Communities - a good relationship with parties that are geographically close to DSM's operations is important to maintain the company's license to operate	Open days, news bulletins, social media, education, support through local initiatives	- In North America, DSM committed to help mitigate the current refugee crisis by setting up employee volunteer English language programs and cultural training, hiring employees and working with groups such as Upwardly Global on refugee and immigration issues.
Governments - DSM engages with governments individually, as part of coalitions or through its memberships of relevant trade associations	Meetings with officials, position papers on the company website, case studies, letters, reviewing proposed legislation, engagements in trade associations	- DSM engaged with the European Commission, Members of the European Parliament and Member States on reviewing the Circular Economy Package and the Bio-economy Strategy in 2016. - DSM advocated the importance of Mission Innovation to the government of the Netherlands, a global initiative to double public investments in energy innovation by 2020, resulting in the Netherlands signing up to the initiative. - DSM's new business ventures and innovations (such as Niaga®, Decovery® and advanced biofuels) were presented at events such as the European Business Summit, the European Retail Round Table, and the European Forum for Industrial Biotechnology and the Bioeconomy, leading to more exposure within Europe. - DSM participated in Startup Fest Europe, held under the patronage of its Chairman, Prince Constantijn van Oranje. DSM was one of the companies hosting a section of the event dedicated to energy solutions.

- We have implemented a key account approach to build relationships with customers and ensure that we reach mutually agreed goals. The customer executive sponsorship program, launched in 2014, has resulted in co-developments in all our industries. We co-develop solutions with customers to jointly implement customer- and consumer-driven innovations. For example, in 2016 we partnered with Nexeo Solutions, a global chemicals and plastics distributor, to bring new, high-value performance filaments to customers who perform 3D printing using fused filament fabrication (FFF) technology.

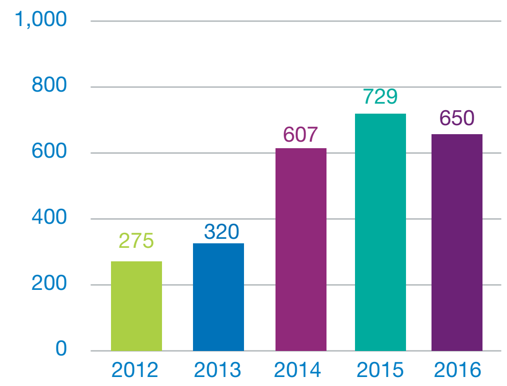
"The 3D printing sector, and particularly its FFF segment, represents an exciting, high-growth market with new found potential. Partnering with DSM means we can be sure that our customers will have access to an innovative new range of products specifically developed for 3D printing." Jérôme Abrahmi, VP EMEA at Nexeo

- With our strong science base as a differentiating factor, we share our knowledge at conferences and trade shows and ensure that our valuable insights are accessible to our customers and partners through relevant platforms, communities and our sales force.
- A skilled sales force is crucial for ensuring the best customer experience and personalized interactions. All our sales people are selected on the basis of their industry experience and knowledge, and we invest in their continuous development. For example, we have partnered with a leading business school to launch a learning portal and training program for our Marketing & Sales professionals.
- Digital transformation is allowing us to further optimize customer and consumer interactions by strengthening our global online presence (both through websites and through social media) to improve our outreach. For example, DSM Dyneema integrated the customer relationship into its web presence through its 'Where to Buy' connections. This not only shows our strong relationship with our customers but also generates leads for them.
- The success of our customer-centric approach is measured through the use of Net Promotor Score® (NPS). In 2016, DSM increased its overall NPS score to 38 (in 2015: 35), which ensures that it remains one of the leading companies in its sector. In the B2B space, an NPS score in the 30s is considered high. A three-point increase on this is a significant achievement and testifies to our drive to continuously improve in response to customer feedback.
- DSM considers its brand an important business asset and aspires to be a company with a strong brand and reputation for providing innovative and sustainable solutions that fulfill the needs of its market segments and society. DSM's brand value as assessed by Brand Finance has grown considerably over the last five years and for 2016 was valued at €650 million.

The decrease versus prior year was primarily attributable to the portfolio changes that took place in 2015.

DSM Brand Value*

(x € million)

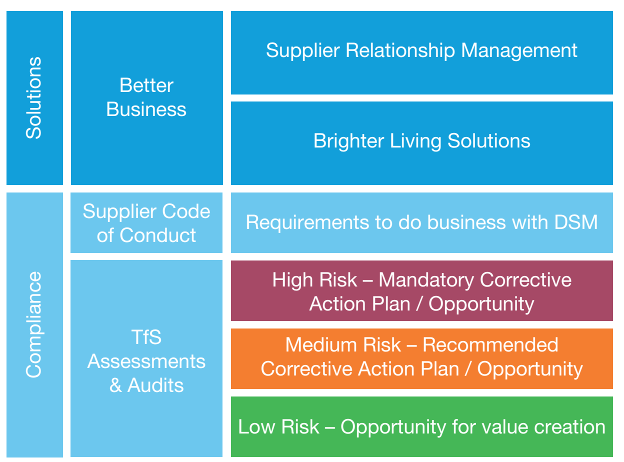


* As measured by the Brand Finance valuation methodology

Suppliers

DSM needs to be smart in how it engages with its 40,000 suppliers. We do this through a Supplier Sustainability Program (SSP), which is implemented through annual supplier sustainability plans and sustainability roadmaps. Progress against targets is shared on a quarterly basis within DSM Sourcing and also with the Managing Board. The Supplier Sustainability Plan 2016 addressed a number of relevant topics for the materiality matrix: Resource scarcity/circular & bio-based economy, Responsible business practices, and Climate change & renewable energy.

DSM Supplier Sustainability Program



BICEPS: Leveraging shared capabilities for a better world

At DSM, we believe our sustainability responsibilities go beyond our own borders.

Ninety percent of global trade goes by sea, and every day 100,000 vessels ply the oceans. Thirty percent of DSM's transport is seaborne, so some 40,000 box containers a year journey either between our own plants or to our customers. We have reduced the carbon footprint of our own distribution activities through supplier collaborations and modality switches, but with 20 million containers in circulation, our ability to effect direct change is limited.

DSM partnered with AB InBev, AkzoNobel, Friesland Campina and Huntsman to form the BICEPS Network (BICEPS: Boosting Initiatives for Collaborative Emission reduction with the Power of Shippers) with the aim of developing a common approach to sustainability in the global procurement of ocean freight and the selection of shipping lines.

The network uses the BICEPS Rating System, which analyses the sustainability performance of shipping lines in five categories: communication and reporting on sustainability, emissions and target-setting, improvement projects, cross-modality collaboration, and long-term ambitions. The rating is used as a criterion in the selection of shippers, but also as an encouragement to sustainable development. It furthermore enables small-scale innovators in the industry to connect directly with the shipping lines. Together with the network, we can achieve greater emissions reductions than if we operated alone.

Walter Vermeer, Manager Category Procurement Logistics FrieslandCampina: "FrieslandCampina is consciously working on impact reduction in every step in our grass-to-glass supply chain to enable realization of climate-neutral growth. Participating in the BICEPS network helps us and our partners add greener ocean shipping into our scope."

Supplier Sustainability Program strategy

DSM's SSP consists of two main elements: compliance and solutions. By means of the compliance program we have been able to very clearly define how we choose to do business with our suppliers. We have invited suppliers to contribute to our competitiveness in areas of sustainability, innovation, business growth, security of supply, new business models and strategic alliances. This occurs via our 'better business' projects and other initiatives.

In 2016, DSM assessed the maturity level of its SSP along four dimensions: Strategy/Plan; Supply Risk & Opportunity; People, Infrastructure & Measurements; and Processes. The maturity assessment was used to indicate areas of improvement to meet the ambition level for 2020. The SSP was also benchmarked against the practices of other leading sustainable companies. The results of the benchmark and the maturity assessment were incorporated in the Sustainable Purchasing Roadmap 2016-2020, which aims to anchor sustainability even more firmly in DSM's daily sourcing activities.

Internal skills and capabilities

Internal capability-building continued in 2016. Further training in sustainability was provided to the sourcing community. The trainings offer practical tools on integrating sustainability into the daily work of sourcing professionals. The Strategic Sourcing Award and Key Supplier Management Award highlight sustainability as a key topic in selecting the winners.

Collaboration

DSM works with external partners to enhance collaboration in the supply chain. These include the Roundtable for Sustainable Palm Oil (RSPO), Together for Sustainability (TfS) and the Dutch consulate in China.

- While palm oil is only used on a very limited scale by DSM, RSPO membership is important due to the potential risks to the environment, human rights issues and labor practices in the palm oil supply chain.
- DSM has 'Friends of the Sea' certification for over 98% of its fish oil purchases and ensures that the fisheries involved in providing fish oil for the production of its omega-3 product range are sustainable.
- We are collaborating with the Dutch consulate in China in a project that focuses on sustainable supply chains in China. The Consulate General of the Netherlands in Shanghai partnered with two professional CSR advisors, China National Textile & Apparel Council and Solidaridad China, for this three-year CSR project. Within the framework of the project, a Sustainable Supply Chain Management Platform for Dutch Businesses in China was established, providing a training program focusing on topics such as EHS (Environment, Health and Safety), CSR management system, and labor issues. In 2016, 16 Dutch brands and 54 local factories (suppliers of the Dutch brands as well as member companies of Jiangsu

Federation of Industry and Commerce) participated. DSM has nominated four suppliers to join this initiative.

Compliance

DSM's approach to compliance is via the Supplier Code of Conduct (SCoC), comprising assessments and audits to check that suppliers act in compliance with the norms and values of DSM. Where a risk or breach occurs, DSM works with suppliers to define and execute an improvement plan. If non-compliance still persists, DSM may choose to terminate the relationship with the supplier. In 2016, 96% of DSM's spend was covered by the SCoC. Since 2015, sustainability compliance has also been integrated into our standard supply risk management approach and new supplier onboarding process.

We focus on approximately 1,000 critical suppliers, defined as those that provide critical components, are located in potentially high-risk countries, supply a high volume of products or services, are non-substitutable, or have the potential to create shared value in areas of innovation and sustainability.

Since 2015, we have been actively collaborating with TfS. Founded in 2011, TfS now has 19 members (and rising) and aims to develop and implement a global audit program to assess and improve sustainability practices within the chemical industry's supply chain. TfS works with EcoVadis, a recognized provider of CSR ratings, to implement the program. The EcoVadis methodology is aligned with international standards and supervised by a scientific committee. This collaboration gives DSM access to assessments and audits which are executed by other TfS members and shared on the TfS platform. This collaboration enabled DSM to screen approximately 4,200 suppliers in 2016, resulting in 1.4% being identified as 'suppliers at risk'. In line with internal follow-up guidelines, these will be further investigated by means of an on-site audit of their facilities so as to ensure that improvement plans will be made. DSM was able to screen 7% of new suppliers with regard to their environmental performance, impact on society, human rights and labor practices. The average EcoVadis sustainability performance score of DSM's supply base improved by 2% in 2016. The average of the supplier performance level indicates that our suppliers are engaged with sustainability.

The collective (potential) supply base of the TfS members has been rated by 6,383 EcoVadis assessments and 724 TfS audits. In 2016, a total of 1,773 sustainability assessments were shared among TfS members and 241 new TfS audit reports were received by the initiative.

Supplier Sustainability Program results

	2016			2015		
	Target	Achieved	Leverage TfS[1] pool	Target	Achieved	Leverage TfS[1] pool
Spend coverage SCoC	91%	96%	-	91%	95%	-
Sustainability assessments	200	200	996	200	252	690
Sustainability audits[2]	20	20	105	20	10	27
Quality audits	-	241		-	251	-
Solutions	36	50		30	46	-

1 Total number of DSM suppliers assessed by TfS members
2 The lower target set for Sustainability audits in 2015 resulted from DSM's membership of TfS

Moving beyond compliance

Our collaboration with TfS and partner EcoVadis gives us insight into the compliance of our supply base with our sustainability criteria. Beyond this, we will look to increase transparency regarding the incidents involving our suppliers using a 360-degree monitoring process that includes insights from online news sources on positive or negative CSR developments on the part of the suppliers we assess. As a first step, the suppliers screened in 2016 were assessed on legal and financial sanctions of any scale whatsoever. The area of labor and human rights currently trends as being of highest concern among those assessed.

Better business

While compliance remains the cornerstone for achieving a sustainable supply base, procurement activities will increasingly focus on so-called 'better business'.

As part of our drive to foster better business through our supplier solution projects, DSM's Sourcing organization engages in proactive dialogue with suppliers in order to move the business agenda forward on topics such as climate change, food & nutrition security, health, and the circular economy. In this context, Sourcing pursues initiatives to create joint value, awareness and engagement in areas related to Brighter Living Solutions.

We continued to engage in joint initiatives with suppliers that led to environmental benefits in the value chain, such as projects in packaging, logistics, and reduction in raw materials and carbon emissions. Via the CO_2 Emission Reduction Initiative, the physical distribution team investigates suppliers' footprints in road transportation, marine and packaging to explore opportunities for improvement. This is a continuation of the Green Tender Initiative that began in 2012 with the aim of achieving a 20% reduction in emissions associated with logistics and packaging. Since 2012, over 30% of our global spend on physical distribution has been covered by the Green Tender Initiative. The cumulative CO_2 emission reduction compared to 2010 reached 15% at the end of 2015, the latest reporting period.

We use carbon pricing of €50 per ton CO_2 equivalents (CO_2eq) internally to evaluate our industrial gas purchases. By embedding the internal carbon price in the template RFQ for industrial gases, we make our sites more aware of the financial impact of industrial gas supply. The carbon price for two cases in Switzerland and the Netherlands had an impact of 2-4% and 17% on the total cost of ownership, respectively. In Switzerland, this confirmed that our chosen supplier was the correct business decision. In the Netherlands, the difference between the best solutions was not significant enough to influence the decision making although it showed a significant improvement over the existing situation. Business managers agreed that the inclusion of the carbon price had an added value for the RFQ process.

DSM Nutritional Products' Purchasing team has been working on replacing an 18% hydrogen chloride (HCl) solution used at its Dalry site (UK) with a more concentrated solution, which will be diluted on site. This obviously has more than mere economic benefits, as transportation can be significantly reduced by diluting the HCl on site, rather than transporting the water component of the solution across the north of the UK. The annual environmental impact will be a saving of some 560 tons of CO_2eq emissions, equivalent to planting 15,000 trees.

Collaborative platforms and networks

We collaborate with like-minded peers within cross-sector platforms and business networks to develop social and environmental measurement and performance standards, to find new opportunities within our sustainable growth areas, and to act as advocates on material topics such as climate change & renewable energy, nutrition, the circular economy, and natural and social capital. Below, we describe our engagement with some of the most significant global, partnership-based strategic initiatives.

World Economic Forum (WEF)

- As a strategic partner, we attended WEF meetings throughout 2016, including the Annual Meeting in Davos. We strengthened our presence at regional meetings, including in Africa and Latin America, to bring visibility to important DSM partnerships and initiatives concerning nutrition and climate change.
- In June, our CEO Feike Sijbesma co-chaired the Annual Meeting of the New Champions in Tianjin (China) and led roundtable sessions about pioneering the circular economy, implementing the climate deal, and the impact of the fourth industrial revolution.
- We continued our engagement in WEF CEO Climate Leaders, specifically around carbon pricing. Together with the WEF, the CPLC and Yale University, we initiated a learning track on internal carbon pricing, with the launch of a webinar series. Our CEO Feike Sijbesma and CFO Geraldine Matchett featured in the first webinar, which was about 'Practical experiences from the private sector'.

World Business Council for Sustainable Development (WBCSD)

- We co-chaired the WBCSD Reaching Full Potential group, with – among others – Solvay, BASF, AkzoNobel, Evonik, Eastman, Henkel, and SABIC. A guidance on Social Life Cycle Metrics for the Chemical Sector was published in November.
- Together with leading businesses and top accounting firms, we participated in the WBCSD Social and Natural Capital project. The project aims to foster simple and practicable methods for monetization. Our contribution has led to the publication of methods for monetizing safety, skills and employment.
- As part of the WBCSD Product Sustainability Assessment group, we have been aligning with our peers on portfolio steering methods, with a focus on hazardous substances and toxicology, and building on Life Cycle Assessment (LCA) and product social metrics methodologies.
- Within the Low Carbon Technology Partnerships initiative (LCTPi) – a multi-stakeholder platform led by the WBCSD that presents the opportunities of large-scale development and deployment of low-carbon technologies – we helped set up the new global campaign 'below50'. This campaign unites companies that produce, use and/or invest in fuels that are at least 50% less carbon-intensive than fossil fuels. The aim is to promote the best sustainable fuels that can achieve significant carbon reductions, and to scale up their development and use.
- A DSM executive has been seconded to the WBCSD to set up the Food Systems Transformation program to address the key challenges of food systems. Our material topic Malnutrition & nutrition security is being addressed, including sub-topics such as obesity, calorie & nutrient balance in food, and sustainable protein supply.

Accounting for Sustainability (A4S)

- Our CFO Geraldine Matchett continued her active role in the A4S CFO Leadership Network, with a focus on topics such as the importance of having a comprehensive conversation with investors on long-term value creation, as well as the importance of actively engaging the finance function internally on the value of sustainability as an essential component of good enterprise management.

- We continued to contribute to A4S projects through the participation of our experts in both its finance and sustainability teams. The main focus was the completion of the project ‘Integrated management reporting’, to help business embed environmental and social considerations into (internal) management reporting in order to enhance decision making. We shared our own best practices, such as linking performance management and remuneration with sustainability targets, and also gathered new insights from other A4S members into the topics they discuss in their wider interactions with the financial community.

Carbon Pricing Leadership Coalition (CPLC)

- In April, our CEO Feike Sijbesma was appointed Co-Chair of the High Level Assembly of the CPLC. The CPLC’s long-term objective is for carbon pricing to be applied throughout the global economy. In addition to facilitating leadership dialogues, the CPLC will also mobilize business support to put an internal price on carbon. As Co-Chair, Mr. Sijbesma shared DSM’s experience with applying an internal carbon price of €50 per ton CO_2eq when reviewing large investments, and called on businesses to do the same.

Ellen MacArthur Foundation

- We continued our engagement with the Foundation, participating in Project Mainstream, a global multi-industry initiative to accelerate business-driven innovation to help scale up the circular economy. We contributed to ‘The New Plastics Economy: Rethinking the future of plastics’, a publication which provides a vision of a global economy in which plastics never become waste, and which outlines concrete steps to achieve this systemic shift.
- We offered employees an internal training program on the circular economy delivered by CE100 and Bradford University (UK).

RE100

- We continued our engagement with RE100 during 2016 and participated in the learning opportunities that are available through this peer-learning, advocacy and action platform, which is led by the Climate Group.
- As part of our RE100 commitment, we joined forces with AkzoNobel, Google and Philips in a long-term commitment to jointly source power from renewable energy projects in the Netherlands. The first agreement – to buy power from Windpark Krammer in the province of Zeeland – will cover approximately half of DSM’s bought-in electricity requirements in the Netherlands. See 'Planet' on page 53.

Dutch Sustainable Growth Coalition (DSGC)

- We continued our engagement with the DSGC, with a focus on the SDGs. As co-initiator of the Dutch SDG Charter, we used the coalition to raise the profile of the Charter and encourage more Dutch companies to commit to joint action on SDGs of national priority.
- In December, we facilitated a masterclass as part of a conference on the SDGs, in which students shared their ideas on how to engage with the financial sector to drive and finance improvements and innovations in renewable energy technologies, rather than scaling up existing renewable energy technologies alone.

Cross-sector nutrition partnerships

As a leading micronutrient provider, DSM develops innovative solutions for improved nutrition. In order for these solutions to have the broadest reach, we work with partner organizations that have direct access to beneficiaries. DSM's nutrition partnerships focus on the following objectives: wider base of scientific evidence and endorsement; increased market for nutrition products; and improved employee engagement.

DSM's partners range from UN agencies, governments, academia and NGOs to industry peers. We commit support through financial and non-financial means including time, technical expertise, products and volunteers. DSM's main partners are described below. For a more extensive list and description of DSM's other nutrition platforms and partnerships, see the company website.

Cross-sector nutrition partnerships

Partner	Partnership benefits	Impact
World Food Programme	- Product development - Value chains for enhanced nutrition - Advocacy - Employee engagement and development - Corporate reputation	The DSM-WFP partnership 'Improving Nutrition, Improving Lives' aims to improve the nutritional value of the food that WFP distributes through product innovations such as fortified rice and a product aimed at people living with HIV/AIDS. The partnership reaches over 28 million beneficiaries per year with improved nutrition. Further to this, DSM continues to support WFP in the development of learning and development initiatives.
unicef	- Value chains for enhanced nutrition - Market-based solutions for improved nutrition - Advocacy - Corporate reputation	DSM and UNICEF collaborate to support micronutrient programs in Nigeria, with the initial pilots executed in the course of 2016. Additional focus will be placed on micronutrient supplementation programs specifically targeting women and adolescents girls. The partnership continues its capacity support of the African Nutrition Leadership program.
World Vision	- Value chains for enhanced nutrition - Market-based solutions for improved nutrition - Advocacy - Corporate reputation	DSM and World Vision International's flagship project in Tanzania, Miller's Pride, was fully ramped up in 2016. A number of successful fortification trials have led to approval from the Tanzania Food & Drug Authority for maize fortification. Millers have improved food safety, hygiene and manufacturing processes. We are also ramping up another program, 'Joining forces for last mile nutrition'.
Partners in Food Solutions	- Market-based solutions for improved nutrition - Employee engagement and development - Corporate reputation	Partners in Food Solutions is a multi-sector partnership between the companies DSM, General Mills, Cargill, The Hershey Company, Bühler and Ardent Mills, working in partnership with USAID, TechnoServe and Root Capital to serve more than 600 small and growing food companies throughout Africa. Partners in Food Solutions realized additional growth in West Africa. DSM volunteers from Latin America, Europe and India continued to share their willingness to dedicate their technical and business expertise to improving the performance of food processors and millers in Africa.
Scaling Up Nutrition Business Network	- Market-based solutions for improved nutrition - Advocacy - Employee engagement and development - Corporate reputation	The SUN Business Network (SBN) represents the private sector in the Scaling Up Nutrition (SUN) Movement. The Network recruits and supports companies who pledge to contribute to the improvement of global nutrition. CEO/Chairman of the Managing Board Feike Sijbesma is a member of the Lead Group of the SUN Movement and Co-Chair of the Advisory Group of the Network. Via the network, DSM supported a number of SBN projects in Zambia.

Philanthropy and sponsorships

DSM continues to be recognized by the business world, government, civil society and the academic community as a respected thought leader in clean energy, climate change, nutrition and the circular economy. Besides striving for excellence in sustainability-oriented innovation, we also engage in classic philanthropic and sponsorship activities in support of non-governmental and civil society organizations. In 2016, DSM donated more than €2.5 million to a range of initiatives. DSM makes no political donations, as outlined in its Code of Business Conduct, the text of which is available on the company website.

The Ocean Cleanup

DSM is a partner and sponsor of The Ocean Cleanup, a non-profit foundation launched in 2013 with the aim of developing sustainable and scalable technologies to help solve societal problems, including the issue of waste plastics in the world's seas. Founded by the young Dutch entrepreneur Boyan Slat, The Ocean Cleanup has developed a prototype floating barrier system – described by TIME magazine as "one of the world's best inventions in 2015" – that uses the ocean's natural currents to round up and concentrate plastic waste. Consistent with our company focus on sustainability and environmental innovation, we were pleased to lend our materials expertise to The Ocean Cleanup. We are supplying Dyneema® material to maritime rope supplier Lankhorst Ropes, and together providing the key technology for the barrier's mooring system.

China

DSM hosted the Bright Experience Event to support the goal of ending hunger and malnutrition in 15 cities across China during 2016. These events aimed to raise awareness of, and funds for, the issue of child hunger and malnutrition. They attracted 2,500 DSM employees and their families, as well as partners at 16 sites located across 15 cities, including Shanghai and Beijing. The money collected at the events will be donated to the WFP's School Feeding Programmes worldwide and the China Foundation for Poverty Alleviation. Through the project, we provided more than 50,000 nutritious meals containing milk and eggs to children in poor areas of western Chinese provinces.

India

DSM committed more than €76,000 to sponsoring and supporting civil society and non-governmental organizations in India in 2016. Most of these initiatives focus on the state of Maharashtra, which has over 112 million inhabitants. Most DSM activities targeted the Pune, Thane and Palghar districts. We are raising awareness of nutrition in partnership with the Indian Academy of Pediatrics. The central topics of the collaboration are eradicating malnutrition and promoting preventive healthcare in these districts. Together with the ISKCON Food Relief Foundation, we support the mid-day meal program of school children in Maharashtra in order to help eradicate hunger.

North America

The DSM North America Employee Relief Fund is a group funded and run by DSM employees to help their fellow employees who suffer severe losses as a consequence of natural disasters. In 2016, the group helped fellow employees recover from Hurricane Matthew.

DSM provided USD 44,000 to the leadership development organization Global Health Corps and the non-profit organization 1,000 Days to underwrite the cost of two Global Health Corps Fellows working at 1,000 Days to create an educational campaign about the importance of nutrition. The two Fellows are helping raise awareness of malnutrition and delivering cost-effective interventions to address micronutrient deficiencies among underprivileged families in New Jersey, USA.

Sight and Life

The Sight and Life foundation champions a world free from malnutrition and aims to improve nutrition of the world's most vulnerable populations. Through continued support of the Sight and Life foundation, DSM furthers the advancement of research, implementation science, and leadership capacity development in nutrition.

The Sight and Life foundation engaged in an exciting public-private partnership in Ghana, known as Affordable Nutritious Foods for Women (ANF4W), working to establish a market-based solution to improve the nutritional status of women of reproductive age with fortified food products. In addition, Sight and Life joined forces with PATH, a non-profit organization charged with global health innovation, and local partners to develop a program promoting good hygiene habits and delivering a nutrient rich meal of fortified rice to 2,600 schools in India. To encourage innovation in the nutrition landscape, the Sight and Life foundation developed the Elevator Pitch Contest, a unique forum for young innovators in nutrition to make their case on why their ideas deserve funding.

With the right mix of funding, knowledge, technology, and enabling policy, Sight and Life advocates with its partners the global fight against malnutrition and micronutrient deficiencies.

External recognition

We are proud whenever our sustainability, quality and innovation efforts, either as a company in general or specific to our individual products and solutions, are recognized by the outside world. Below is a selection of some of the awards and other forms of recognition that we received from non-governmental and trade organizations, customers, suppliers and academia in 2016. Other awards and external recognition for our business groups can be found in 'Review of business' starting on page 62. A full list of our recognitions can be found on the company website.

	Organization	Recognition
	Corporate Knights	In January, the Corporate Knights Global 100 Index 2016 of the most sustainable corporations in the world listed DSM as the highest-ranked chemical company and 23rd overall. Featured companies are considered leaders in transparency and resource productivity, as well as on a range of other social and governance indicators.
	Young Global Leaders Circular Economy Taskforce	During the World Economic Forum's annual meeting in January, our CEO Feike Sijbesma was jointly awarded the Fortune Award for Circular Economy Leadership in recognition of his role in spearheading DSM's circular economy strategy and our groundbreaking research into fossil-fuel substitutes.
	New York Festivals	In April, at the New York Festivals Best TV & Films 2016 ceremony, our 'Unsung Heroes of Science' movie garnered Gold, Silver and Bronze World Medals in the Corporate Social Responsibility, Public Relations and Internal Film categories respectively.
	European Association of Communication Directors (EACD)	In July, our Communications and Branding Team won the 'Company Communications Team of the Year Award 2016' in recognition of the success of its 'Unsung Heroes of Science' campaign. The award is an initiative of the EACD – the leading network of European communication professionals – to recognize communication excellence.
	Fortune Change the World List	In August 2016, Fortune Magazine revealed that DSM was included in its second annual 'Change the World List' which highlights the 50 leading companies that are innovating to solve the world's biggest challenges through core profit-making strategy and operations.
	RobecoSAM	In September, DSM was named the worldwide leader in the Materials industry group in the Dow Jones Sustainability World Index. We have consistently been recognized for integrating sustainability into our business, having been named among the global leaders in each of the past 13 years and having held the number one position in the sector 7 times.
Ethical CORPORATION	Ethical Corporation	In September, our 'Science Can Change the World' campaign took first place in the Best Communication category at the Ethical Corporation Responsible Business Awards 2016. DSM was also highly commended in the Best Sustainable Company category. The Awards recognize genuine, truly innovative and meaningful approaches to making responsible business a reality.
CDP	Carbon Disclosure Project (CDP)	In October, we were included on the Climate A List by CDP, which identifies DSM as a global leader for our actions and strategies in response to climate change. CDP is a non-profit organization that helps companies worldwide to measure, manage, disclose and ultimately reduce their greenhouse-gas emissions.
FTSE4Good	FTSE4Good	DSM was again featured in the FTSE4Good Index. This international sustainability index is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance practices. DSM had a maximum score of 100.

People in 2016

DSM aims to foster a high-performance culture to support delivery of our targets and aspirations. We seek to attract and retain original thinkers and doers who can further our company's capabilities while actively developing their own credentials and careers. We achieve this by providing a healthy, diverse and above all safe working environment for employees and by supporting and encouraging them in their personal development.

DSM's international profile means that its employees represent 98 nationalities, working at more than 200 sites and offices in 46 countries worldwide. This allows us to be close to our key markets and customers as we pursue profitable business growth around the globe. Our strategy is aimed at stimulating inclusion, diversity and inspirational leadership. It is governed by means of a regional system with clear accountability for performance at Managing Board level.

Our People Strategy 2018 in support of DSM's Strategy 2018: *Driving Profitable Growth* focuses on three pillars for attaining a more performance-oriented workforce: 1) agile employees, 2) skilled employees and 3) accountable employees. This strategy is aligned with our material topics and supports DSM's commitment to the Sustainable Development Goals (SDGs). The key material topics relevant to People are:

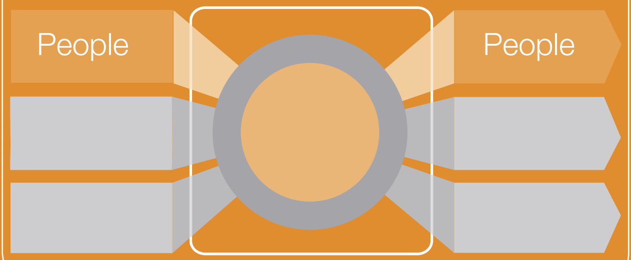
- Health & wellness (covered by 'Safety and Health');
- Malnutrition (covered in 'Stakeholder engagement' on page 25 and 'Review of business – Nutrition' on page 64);
- Careers & employment ('Leadership & people management programs', 'Developing and managing our talent', and 'Learning and development'); and
- Responsible business practices ('Human rights').

Our People strategy also focuses DSM's engagement on the two most relevant SDGs for the People dimension: SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-being).

This chapter outlines DSM's approach toward its employees, which is embodied in the company's safety and health policies and people strategy including our Life Saving Rules. Our approach toward people affected by DSM's operations is governed by our policies on human rights, the Brighter Living Solutions program, and our Supplier Sustainability Program.

The performance elements of our People strategy are detailed in the 'Sustainability statements – People' on page 127. See also 'How DSM creates value for its stakeholders' on page 20 and 'Stakeholder engagement' on page 24.

How DSM creates value



Ratio female/male employees
27/73

Inclusion index
73%

Employee Engagement Index favorable score
71%

Average training hours per employee annually
25

Frequency Index of Recordable Injuries (per 100 DSM employees and contractors)
0.33

DSM-WFP beneficiaries annually
28 million

2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING

DSM focuses on SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-being) in our People dimension

DSM's People & Organization objectives

People indicators

	Aspirations 2020	Realization 2016
Frequency Index of Recordable Injuries	0.25	0.33
Employee Engagement Index	Toward 75%	71%
Diversity - Female executives	25%	15%
Diversity - Executives from under-represented nationalities	60%	53%

Safety and health

Personal safety and process safety

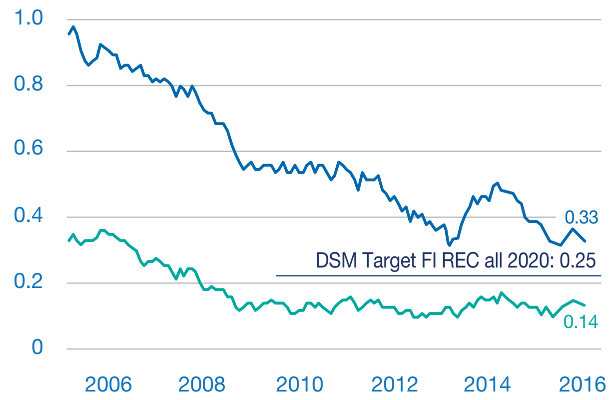
Rigorous application of DSM's Life Saving Rules has been a significant factor behind DSM remaining fatality-free for the last five years, among both our own workforce and contractor personnel. Nevertheless, with the ambition to become a completely incident- and injury-free company, the incidents that still occur, along with the severity of their consequences, are always a cause for concern and a spur to action. We consequently set targets and monitor performance regarding both personal and process safety at DSM. These are defined in the DSM Responsible Care Plan 2016-2020.

Personal safety incidents are those which affect people only. Personal safety is measured through a Frequency Index of Recordable Injuries in which Fatalities, Lost Workday Cases, Restricted Workday Cases and Medical Treatment Cases of all persons present on site are shown – employees as well as (supervised and other) contractors and visitors. In 2016, the index improved from 0.41 to 0.33. This improvement is mainly due to portfolio changes and to performance improvements in the units belonging to DSM in both years. The Frequency Index of Lost Workday Cases for DSM employees was 0.14 (2015: 0.13).

The Frequency Index of Recordable Injuries among contractors improved from 0.70 to 0.56 in 2016. This was mainly due to the portfolio changes mentioned above. The year 2016 was also the first full reporting year following the implementation of the new permit to work standard in 2015. Efforts were also made to increase awareness for the importance of a good last-minute risk assessment. Contractor safety continues to have our attention as we strive for the safest possible working environment for all.

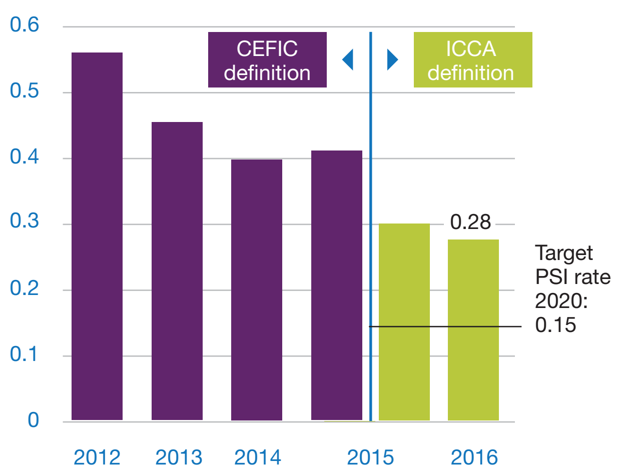
Frequency Index of Recordable Injuries

12-month moving average



Process safety incidents are those which affect plant or storage facilities directly. They are rare but can have a major impact, with effects on people and/or the environment both within and beyond site borders. As of 2016, process safety is measured by recording incidents that comply with the definition given by the International Council of Chemical Associations (ICCA). The change in definition led to a new target for 2020 of 0.15, which is aligned with our earlier aspirations. The PSI rate moved from 0.41 under the CEFIC definition to 0.30 under the ICCA definition per the end of 2015 mainly because releases of non-hazardous substances are not considered in the newly applied ICCA definition. The PSI rate slightly improved throughout the year 2016 to 0.28.

Frequency Index of Process Safety Incidents



Of the incidents in 2016, most related to an unintentional release of certain substances (in varying quantities) from a DSM plant or storage facility that could be remediated without further consequences. There were a small number of incidents of a different type, which are listed in the chapter 'What still went wrong in 2016' on page 122.

For a full description of the personal safety and process safety frequency indexes, see 'Explanation of some concepts and ratios' on page 217.

DSM's safety planning focuses on risks, to ensure that the company's efforts are primarily directed at the potential incidents and situations that would pose the highest risk, and that steps can be taken to avoid their occurrence. Adherence to DSM's Life Saving Rules is also an important element in the internal auditing system, which is applied at all levels of the organization – corporate, business group and site.

Based on the incidents that have occurred in recent years, it is clear that improving risk awareness and alertness among the workforce is a crucial success factor. DSM will consequently prioritize improvements to its behavioral systems in support of this, with a key role for management in leading by example.

Further improvement will also be driven by continuing to rigorously instill and enhance SHE competences at all levels. The changes in DSM's business portfolio in recent years have inevitably led to differences in SHE maturity across the company. Furthermore, our current operating network consists of more smaller sites around the world than in the past, and these need to be self-supporting in terms of SHE. We will deploy dedicated classroom-based and on-the-job training to close these competency gaps.

Employee health management

DSM recognizes that healthy working conditions make a significant contribution to employee health and well-being. They also have an important positive impact on employee engagement and productivity. Employees and company alike benefit from healthy working conditions in today's increasingly fast-paced and competitive world. In response, we have implemented policies and initiatives to safeguard employee health by mitigating workplace risks, and to promote and support employee health and well-being.

With a view to prevention, a training program on industrial hygiene was launched in 2015 and continued in 2016. This aims to ensure that DSM has adequate competences regarding industrial hygiene at all sites, with an emphasis on ensuring that appropriate control measures are in place.

DSM fosters a culture of health among its employees through the Vitality@DSM program. This global health management program provides employees with insights into their own lifestyles and explains the consequences of unhealthy lifestyles.

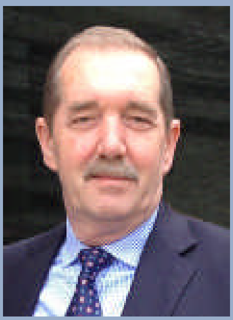
Ocean Nutrition Canada rises to DSM's SHE standards

In the past four years, DSM has acquired some 30 new sites, all of which have had to adopt DSM's strict SHE standards. Ocean Nutrition Canada (ONC), a producer of fish oil-based omega-3 with manufacturing sites in Peru, the US and Canada, is an example.

DSM acquired ONC in 2012 and immediately communicated the importance of full adoption of its SHE standards. A dedicated SHE integration manager with DSM experience was appointed to help the new organization manage this process. DSM's SHE requirements were more demanding than those they replaced, so fulfilling these while managing all the other integration activities and strategic projects, plus keeping ONC's business running at the same time, was a tough challenge for the ONC team.

DSM has a clear SHE integration process. We start by training management in DSM's expectations and standards, and conducting zero assessments of all the plants. The findings of these assessments form the basis for a three-year SHE integration plan that focuses on controlling process safety risks, implementing DSM's Life Saving Rules, and introducing DSM's SHE management system. The new DSM employees approached the required changes with a positive attitude, quickly achieving good results. DSM's attention to employee well-being and emphasis on training were highly appreciated, and cooperation with existing DSM sites in the Americas speeded the adoption of the new standards.

The positive impact of the SHE integration process was confirmed by audits of the three ONC manufacturing sites conducted by DSM's Corporate Operational Audit department. The process provides a template for the SHE integration of any future acquisitions.



Dave Elder, Senior Director of Manufacturing at ONC, comments: "It's been a very interesting transition. We've moved from wanting to avoid accidents on site to actively managing our SHE performance so as to prevent potential incidents."

It also encourages them to take responsibility for changing any unhealthy habits. To maximize engagement, cultural and regional differences are taken into account. The Vitality@DSM program has been running at DSM for almost 10 years, and in 2016 more than 1,500 employees participated in it.

Employees participating in Vitality@DSM receive a general health check-up and fill in a self-assessment questionnaire to evaluate their profile across the dimensions of nutrition, recovery, exercise and mental health. A personal risk score and action plan is provided to make employees aware of their own specific health-related risks. According to the group report, compared to 2015, the cost saving from productivity gains attributable to this program reached approximately € 200,000. Results from the self-assessments employees have completed since the start of the program show that 52% have moderate to very high stress risk; 37% have moderate to very high risk of poor eating habits; 26% seldom or never exercise; and 28% are overweight or obese.

In 2016, DSM participated in the Global Corporate Challenge, a 100-day worldwide program to improve personal health and well-being. In small teams, employees went on a virtual journey around the world, keeping track of their daily walking, cycling and swimming activities. Across DSM, a total of 83 teams took part in the program. On this journey, 78% of participants met the recommended daily levels for physical effort (10,000 steps per day). The program not only raises awareness of the need to be active but also provides participants with information on good nutrition and how to obtain better sleep. In addition, advice is provided on mental health issues. The intention is to further implement this program throughout DSM in the coming years.

A total of six occupational health cases were reported in 2016 (2015: 5). This number represents reported cases, and the real figure may be higher. Cases may develop over a prolonged period of time, and causes may be present in both working and private life, with the work-related portion going unacknowledged. Privacy concerns or cultural factors also influence employees' willingness to report and discuss personal health issues. DSM continued to increase employee awareness of occupational health issues and to increase transparency in the reporting of all occupational health cases the company encounters; for this, the Occupational Health network was revitalized in 2016.

New organizational and operating model

In 2016, DSM continued to implement its new organizational and operating model as part of its Strategy 2018. This focuses on creating a more agile and cost-effective organization. It allows DSM's businesses to focus on growth and leverages the support functions on a global level, and aims to achieve structural cost savings of € 125-150 million against the baseline of 2014. The program aspires to deliver these savings in full by the end of 2017.

Strong progress was made on the design and implementation of new operating models for various support functions (Finance, HR, ICT, Indirect Sourcing and Communication), enabling them to deliver better service at lower cost. The creation of a common Shared Service Organization for a number of these support functions underpins this initiative. DSM also looked deeper into the shared R&D units, aiming to increase their effectiveness and obtain more yield from the same investment.

Additional efforts were made in internal communication concerning organizational change and company culture. These are aimed at creating a better understanding of the new operating model among employees. Encouraging the mindset and behavior necessary to make the new organizational set-up a success will help DSM to achieve its long-term goals.

The organizational changes will result in a headcount reduction of 900-1,100 FTEs. Close to 50% of these will be in the Netherlands, and the remaining approximately 50% will be in the other regions in which DSM operates.

DSM provides fair severance compensation and supports redundant employees in their search for new employment. We apply a clear, objective and transparent process in determining which positions and employees are, regrettably, impacted. We align with employee representation bodies where applicable concerning this process, and we actively interact with works councils.

"I am very proud of DSM's employees. We remain focused on delivering business results while the new operating models come into effect. With their dedication and hard work, our employees have shown that it's possible to carry out a significant reorganization and still deliver on our business growth and performance goals."

Peter Vrijsen, DSM Executive Committee

ONE DSM Culture Agenda

The ONE DSM Culture Agenda aims to support the company's strategic objectives and to equip employees to respond to the needs of an ever-changing world. The Culture Agenda focuses on four themes, and is aimed at supporting employees in: aligning with the realities of their operating environment; setting ambitious targets and delivering on these; encouraging active (co-)creation; and fostering an inclusive culture that embraces differences. These themes create a common language across the organization, and enhance a ONE DSM culture for all our businesses and regions.

In 2016, particular emphasis was placed on the way the four themes and their related behaviors support the implementation of the new DSM organizational and operating model. The ONE DSM Culture Agenda underpinned the roll-out and communication of new operating models for DSM's support functions (e.g. Finance and IT in 2016) as well as driving adoption of the supportive mindset and behaviors needed to help achieve DSM's ambitious organic growth and cost-saving targets.

Continuous improvement
One of the ways in which we drive organizational performance is by fostering a culture of continuous improvement across our sites and operational environments. Our employees are involved in managing processes on a day-to-day basis; they experience bottlenecks and inefficiencies as they occur in practice, often before these are noticed through the application of formal improvement methodologies. The DSM Integral Continuous Improvement (DICI) journey is currently running across approximately 40% of DSM's manufacturing operations. With DICI, we are empowering employees to be able to make continuous process improvements themselves. Sometimes these improvements can be local or relate to specific process steps, but since they can be repeated many times, small changes can add up to have a big impact.

- In Shunde (China), a productivity improvement initiative was started that links employee benefits with both business demand (high quality & low cost) and individual competency development. This resulted in more flexibility and productivity from the operators, increased production, and positively impacted their income, leading to a higher engagement with strong reduction in the turnover rate among operators.
- A group of production operators and engineers at our Kingstree site (South Carolina, USA) uncovered a hidden design flaw that allowed oil and end-product to enter the clean hexane stream (the final wash in the system). This has resulted in an annual saving of approximately USD 1,000,000 for an investment of less than USD 1,000.

Inclusion & Diversity

DSM has a focused Inclusion & Diversity strategy, which is aimed at better reflecting and leveraging our global profile in our workforce.

For Diversity, our immediate priority is to increase the number of women and under-represented nationalities in executive positions. Our aim for 2020 is for 25% of executives to be female and for at least 60% of executives to be from under-represented nationalities.

Over recent years, the number of female executives had increased steadily to reach 15% in 2015. In 2016, this number remained stable at 15%.

Given the relatively small number of Managing Board members, the composition of the Managing Board in 2016, with one female and three male members, came very close to the 30% prescribed by Dutch legislation in terms of gender balance. The current composition of the Supervisory Board is well balanced, in terms of both gender and nationalities, and is in line with Dutch legislation in this regard. More than one third of the members are women (of the seven Supervisory Board members, three are female and four are male). Furthermore, in the Supervisory Board of DSM Nederland B.V., a subsidiary of Royal DSM, one of the three members is female.

Gender balance will continue to require attention, and DSM's Executive Committee has devoted considerable energy to this topic in order to further move the needle. DSM's CEO and Chairman, Feike Sijbesma, has signed the CEO Statement of Support for the United Nations Women's Empowerment Principles, signaling the company's support for gender equality and for the guidance provided by these principles. DSM is taking concrete steps to implement these principles through its Inclusion & Diversity strategy. In addition to recruiting female executives, DSM also focuses on developing female executives from its internal talent pool, and engages in various activities that foster new ways of working and changes in behavior.

In terms of a representative balance of nationalities, DSM still has a considerable number of Dutch nationals among its executives. We aim to further diversify our executive population and aspire to have 60% of executives from under-represented nationalities in 2020. In 2016, this improved to 53% (2015: 49%). See also 'Sustainability statements – People' on page 127.

Going forward, DSM continues to address the geographical distribution of executives and other key functions, keeping a keen eye on gender and nationality balance, as these remain the essential diversity aspects to foster at this stage. We have set new short-term targets to speed our progress in this regard, and aspire to achieve annual incremental growth of 2% for both gender and under-represented nationalities for the executive population in 2017 and 2018. As of 2017, similar targets will also apply to positions immediately below executive level, to ensure a diverse talent pipeline.

DSM's inclusion efforts are reflected in an improving Inclusion Index, which has continued to increase year on year, reaching 73% in 2016 (2015: 72%). The consistent improvement of this index suggests that sustained progress is being made in creating and maintaining inclusive environments across the company.

The DSM Inclusion & Diversity Council, chaired since 2015 by Managing Board member Stephan Tanda, plays a leading role in driving the achievement of the Inclusion & Diversity targets, and in supporting all DSM businesses in creating an inclusive environment in which diversity is embraced.

Workforce engagement

An engaged workforce is essential for DSM to achieve its ambitions. The DSM Employee Engagement Survey, which has been run annually since 2007, is a tool for understanding the level of engagement employees feel for DSM and their work, and the improvements required for DSM to become a high-performing company. The goal is to ensure that DSM is a place where employees feel proud to work, and where they feel they can excel.

In 2016, a total of 15,333 employees (including 264 contractors) completed the questionnaire, which was distributed to all DSM employees (online in 22 languages and on paper in 7). This represents a very high response rate of 79%. This high participation level gives us a more complete picture of what is working well, and where we need to improve further.

The prime focus of the survey is the measurement of DSM's Employee Engagement Index, which is the percentage of employees scoring favorably on a combination of four attributes: commitment, pride, advocacy and satisfaction. The Employee Engagement Index measured in 2016 was 71% (2015: 69%). This is slightly ahead of the overall global norm of 70%. For the highest-performing companies around the world, the benchmark number is 81%. This is the league to which DSM aspires, and we have set an intermediate target for 2020 of toward 75%.

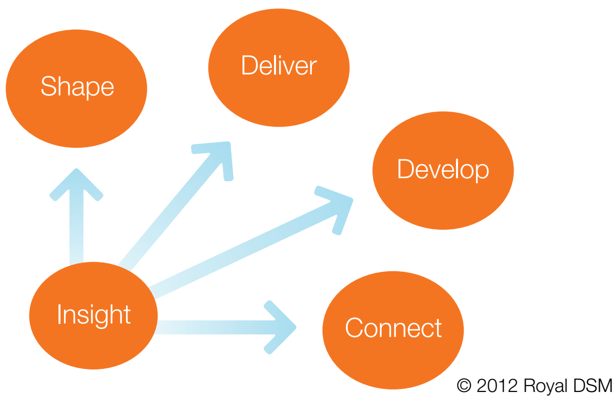
The engagement survey also provides essential information about our employees' views on topics such as DSM's new strategy, working conditions, open communication, career development, sustainability, inclusion, and diversity. These insights have led to real and measurable improvements. For example, the score for "I believe DSM has a promising future" moved from 65% in 2015 to 78% in 2016. This increase clearly indicates the belief that our employees have in the overall DSM strategy going forward. This conviction is also an important engagement driver at DSM. The overall score on improving career development is a point for attention; although the percentage increased (from 58% to 61%), we aim higher. Our people managers play a pivotal role in this effort, investing time with employees to regularly review their career aspirations and identify opportunities for learning and development.

Leadership & people management programs

DSM Leadership Model

The DSM Leadership Model specifies the behavior DSM expects from its leaders and people managers. The model provides a common vision and language for leadership at DSM.

DSM Leadership Model: capabilities and expectations



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In 2016, we continued to embed the Leadership Model in our key processes for hiring, developing, evaluating and managing talent across the organization and for building high-performing teams. The further roll-out of the model to all senior managers continued throughout 2016 with an upgrade of program content, and with 95% of this population being trained by the end of 2016.

To encourage self-learning beyond the training program, DSM created multiple e-learning modules on each component of the Leadership Model in a digital learning platform called Bright Learning, and simplified the process and tooling for providing 360-degree feedback on the model. In addition, the range of employees evaluated in respect of the Leadership Model in their Annual Performance Review has been expanded beyond executives to cover all employees in senior management positions in 2016.

People Manager 2018

DSM recognizes that its people managers (i.e. line managers) play a critical role in achieving Strategy 2018: *Driving Profitable Growth*. To support them, DSM launched a development program called DSM People Manager 2018. The program offers a monthly virtual development campaign that contains learning resources on a selected topic relevant for people managers at that time of the year. For example, the topic for January was ‘Goal Setting’, and the May campaign helped them prepare for career development conversations with their employees. People managers can make use of the digital learning resources (e.g. videos, articles and e-learnings) whenever they want. A survey among people managers showed that 66% of respondents visited the campaign sites multiple times. Of the respondents, 54% felt the campaigns were very relevant for their role as a people manager, with 41% neutral and only 5% who did not feel the campaigns were very relevant. The program will run until 2018.

DSM Lead & Grow program

With the many challenges that the global economy poses, DSM's Strategy 2018 requires our leadership to think and act differently – to fully understand macro-economic trends, use creative and dilemma-solving techniques, and engage and develop the best talent to help the company on its chosen path.

To facilitate strategy execution company-wide, DSM has collaborated with a leading corporate education company to create the DSM Lead & Grow program. Key elements include: external orientation, creative thinking and organization & people.

Lead & Grow was run as a pilot with a group of DSM senior leaders in May 2016, and received excellent feedback regarding both effectiveness and relevance. Based on this successful pilot, Lead & Grow will be rolled out to all DSM executives by mid-2017.

Developing and managing our talent

DSM talent management approach

In 2016, DSM rolled out a new global talent management approach across the company. An analysis of the company’s talent pipeline and its fit with the new strategic growth plans was carried out. It found that DSM requires a good balance between the profound expertise which delivers value for our customers, and the broad agility which is needed to operate in an increasingly complex and volatile environment.

During the year, almost 8,000 of our employees were assessed in terms of their long-term performance and their learning agility. This helped identify individual employees’ current strengths, as well as to craft targeted development plans. Multiple reviews were carried out throughout the year within business groups, regions and global functions, to ensure maximum objectivity and consistency of assessment (the same individual would be assessed more than once from different viewpoints). New talent designations were introduced to identify employees at different organizational levels whose development could be accelerated so as to prepare them for some of the company’s future challenges.

During a three-day DSM Talent Review, the Executive Committee reviewed a global analysis of DSM’s talent pipeline, as well as a full assessment of succession strength for DSM’s key global positions. A best-in-class talent management application, Talent Suite, was introduced to support an efficient and consistent process globally.

The new talent management approach has received very good feedback from DSM’s management. In a year with changing operating models, the investments made in talent management were perceived as both necessary and effective. The global talent pipeline analysis allowed the Executive Committee to identify some clear actions for the future, including new programs that will be rolled out in 2017 and 2018, to further strengthen DSM’s long-term talent pipeline in order to meet the future challenges of the customers and markets we serve.

Accountability for performance

Accountability for performance plays an important role in achieving DSM’s Strategy 2018. To prepare for this, in 2015 DSM adjusted the goal setting and performance evaluations for its employees, and globally launched an online performance and goal evaluation tool. This tool is globally managed and is available to 13,000 employees. All other employees participate in performance evaluations on paper, or using other local systems. At the beginning of 2016, employees were invited to set 'Fewer, Bigger, Better Goals', to create focus on measurable, relevant and challenging targets.

To make employees' performance reviews more powerful, DSM also introduced a self-evaluation component to the global tool so that employees can review their own achievements as well as reflect on important experiences and key learnings over the past year.

Talent acquisition
During 2016, much progress was made on DSM's approach to talent acquisition. All operational recruitment at the managerial level and below has been outsourced through a partnership with an external provider in order to enhance process efficiency and flexibility. A total of 1,256 employees were hired via our newly implemented recruitment process in 2016. The global talent acquisition team also focused on building and delivering functional expertise, designing new recruitment processes, policies and guidelines, and developing a supporting system that is integrated with talent management. In an effort to increase the diversity of the candidates we attract and hire, various initiatives were piloted, including targeted online recruitment campaigns and the design of an in-depth interview training course on bias-free assessment.

Learning and development

Learning and development contributes to the implementation of DSM's strategy by building the core capabilities for driving profitable growth.

DSM is creating a learning culture in which employees see learning as an opportunity to grow. We work in close cooperation with leading international business schools and global training providers such as the International Institute for Management Development in Lausanne (Switzerland) and the Rotterdam School of Management (Netherlands) to design high-quality training courses.

Fast facts

- In 2016, DSM offered over 150 training programs, attracting 3,000 enrolments.
- DSM employees (as registered in DSM's global HR and training systems) received an average of 25 hours training each in 2016.
- 166 employees participated in the Bright Talent Program.
- Ninety-five percent of DSM's leadership population has so far been trained in the DSM Leadership Model.
- In 2016, a comprehensive online learning platform was launched. Called Bright Learning, it consists of more than 2,150 learning modules.
- A new global mentoring approach is being developed, comprising an online platform to self-initiate mentoring relationships plus a supporting toolkit.

New Bright Learning platform

In 2016, DSM introduced a comprehensive online learning platform comprising more than 2,150 learning modules. This platform has unlimited use for the target audience and offers the opportunity to acquire new knowledge and develop skills anytime, anywhere.

Key user Vijendra Desai, Global Service Line Manager at the Global Delivery Center in Hyderabad (India), describes his experience with the platform.

"The Bright Learning platform has really helped my learning and development at DSM. I try to do a course whenever my schedule allows. The best thing about the platform is that I can explore topics closely related to the department that I work in, as well as other subjects that have a bearing on my job. The platform has helped expand my own professional knowledge. I use it to prepare for workshops and training sessions, and as a manager, I make sure to share some of my own experiences with my team. I also encourage staff to use the platform themselves."

Alexander Schellekens, Vice President Finance, DSM Food Specialties, likewise finds the platform very useful for his job.

"I use the Bright Learning platform to select training topics based on my personal leadership development plan or the current situation of my business or department. I use the app to watch short videos about topics that seem of interest. Also when I need to generate some energy, a short learning session is great, offering new insights and ideas. Bright Learning also provides me with very practical tools and tips for dealing with our rapidly changing environment. It keeps me up to date with the latest insights. It also forces me to engage more actively in my personal development as a leader: you're never too old or too experienced to learn."

DSM aims to make learning more accessible so that employees can benefit from development opportunities anytime, anywhere. In addition to formal learning (such as classroom training) we are putting more emphasis on the role of learning through others (such as peer group learning) and learning through experiences (such as guided on-the-job experiences).

The DSM Training Portfolio is available to all employees. It offers a wide selection of programs to build leadership along with functional and professional skills. We are in the process of evaluating the business impact of our learning and development programs.

International Labour Organisation (ILO)

DSM applies the International Labour Standards of the ILO. DSM respects the role of works councils and collective bargaining, and in countries or business where they represent employees we work constructively with these groups. As is the case in the implementation of our new organizational and operating model, DSM develops and implements a social or severance program in the event of significant reorganizations. DSM promotes employee empowerment and human rights protection and maintains dialogues with its employees and representative bodies to enable this. See 'New organizational and operating model' in this chapter.

Human rights

Respecting human rights is essential in all DSM's activities. The basic rights and freedoms to which all people are entitled should be understood, respected and promoted by companies as a cornerstone of being a socially responsible business.

DSM has a longstanding commitment to international declarations and instruments that safeguard human rights, including:

- the UN Universal Declaration of Human Rights;
- the UN Guiding Principles on Business and Human Rights (the Ruggie Framework);
- the ILO International Labour Standards; and
- the OECD Guidelines for Multinational Enterprises.

We have been a signatory to the UN Global Compact since 2007.

Respecting and recognizing human rights is an integral part of existing DSM policies and programs. In addition, DSM has published a human rights position paper to further underscore our commitment. A Human Rights Policy forms the basis to further embed the responsibility to respect human rights in all business functions and regions. DSM's global whistleblower policy (DSM Alert) is in place for both employees and external stakeholders to report any perceived violations of human rights as well as violations of laws and regulations.

DSM has mapped the potential human rights impacts of the company's business activities through a global risk assessment. The assessment has shown that the categories of human rights most relevant and applicable to DSM relates to employees' working conditions and our supply chain. This is why we review and update the company's HR policies and procedures on an ongoing basis. DSM has developed and implemented a global rewards/compensation strategy with the intention of ensuring consistency and fairness (fair pay) in our reward programs across business groups, employee segments and geographies. Regular reviews of policies and guidelines are carried out to make sure they are up to date and meet the standards of our global rewards/compensation strategy.

Beyond our own operations, potential labor and human rights impacts are taken care of through our Supplier Sustainability Program (SSP). The compliance part of our SSP means that we screen suppliers on potential human rights impacts via sustainability assessments and audits. Read more about our SSP and how we manage potential human rights impacts within our supply chain on page 31.

DSM statement on modern slavery

DSM values international business standards and we are committed to ensuring that there is no slavery, forced labor or human trafficking in our supply chains or in any part of our business. Our Supplier Code of Conduct (SCoC) reflects our commitment to acting ethically and with integrity in our business relationships and the commitment we expect from our suppliers to do the same. As part of our initiative to identify and mitigate risks of slavery, forced labor and human trafficking occurring in our supply chains, each of our suppliers is required to sign up to our SCoC in order to work with us and in 2016, our SCoC coverage was 96%. Our suppliers are contractually obliged to comply with its terms and DSM's business and ethical standards. Our SCoC expressly prohibits involvement in human trafficking and the use of slavery, forced labor or child labor.

Besides monitoring compliance with the above, we are working to identify where the greatest risks of slavery, forced labor and human trafficking arise within our business and supply chains, and are reviewing our procedures and policies for combatting slavery and human trafficking, including assessing the need to revise our internal processes and enhance the due diligence we conduct on our suppliers.

You can't solve the problem at the end, you need to start solving it from the beginning of the cycle. This is how we can make a circular economy truly work.

Planet in 2016

DSM's operating network spans more than 100 commercial production facilities in over 40 countries. We report on the environmental impact of these business operations, and commit to delivering improvements, solutions and innovations that contribute to protecting the planet. We aim to improve both our own and our supply chain's environmental footprint, and to deliver environmental benefits to customers and end-users through our Brighter Living Solutions. In our value chain, our key Planet inputs are raw materials (including renewables), energy (including renewables) and water.

This chapter describes our approach toward environmental topics relating to natural capitals that appear in DSM's materiality matrix – Climate change & renewable energy, Resource scarcity / Circular & bio-based economy, Water security, Biodiversity – as well as other relevant topics such as waste, emissions to air, and product stewardship. Our Planet approach directly influences some of the Sustainable Development Goals, such as SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). The topic Sustainable food systems is addressed in 'Review of business - Nutrition' from page 64 onwards. The Planet performance elements are detailed in 'Sustainability statements – Planet' on page 128. See also 'How DSM creates value for its stakeholders' on page 20 and 'Stakeholder engagement' on page 24.

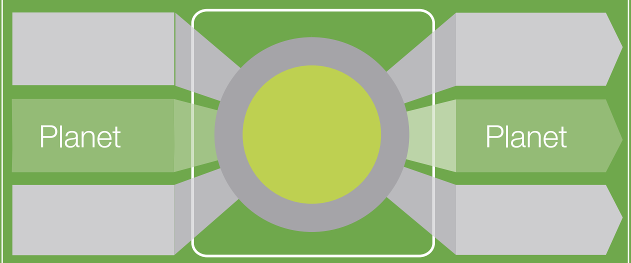
DSM Responsible Care Plan 2016-2020

DSM's Responsible Care Plan 2016-2020 is an integral part of the company's Strategy 2018: *Driving Profitable Growth*. This plan comprises ambitions, targets and actions in the field of safety, health, environment, sustainable value chains (Product Stewardship and sustainable products) and security.

DSM's main environmental target is a further reduction of greenhouse-gas (GHG) emissions per unit of product, in other words, improving our GHG efficiency. Building on the 20% efficiency improvement achieved from 2008-2015, we raised the bar again last year when we set our current target, which aims for at least a further 25% GHG efficiency improvement for the period 2016-2025. This will bring the anticipated total GHG efficiency gains in the period 2008-2025 to 40-45%. DSM's GHG reductions are being driven by improving our energy efficiency by 10% by 2025 compared to 2015, purchasing at least 50% of our electricity from renewable sources by 2025, and exploiting opportunities for heat and fuel from renewable sources.

DSM operates in some regions where concerns exist about water security and air pollution levels. Consequently, we have also defined targets relating to water and emissions to air. As part of our sustainability ambitions and the transition to a circular economy, a waste recycling target has been defined.

How DSM creates value



Greenhouse-gas emissions (in million tons CO_2eq)
1.5

Greenhouse-gas emissions, efficiency improvement
4%

Energy use (in petajoules)
22.6

Energy efficiency improvement
2%

Purchased electricity from renewables
8%

Purchased renewable raw materials
16.5%

Water consumption (in million m^3)
22

Recycled waste
83%

Our Planet approach engages with SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action)

The year 2016 is the first year in which the acquisitions of the Dyneema site in Mesa (Arizona, USA) and the DSM Nutritional Products site in Jiangshan (China), as well as the activities of the new DSM Engineering Plastics NHU joint venture in Zhejiang (China) have been included in the environmental reporting.

The contribution of DSM Jiangshan is material to DSM's Planet reporting. The data of these new units are included in the reported totals but cannot be included in the efficiency improvement indicators yet, since there is no prior reference year available.

Planet Indicators

	Targets	Realization 2016
GHG efficiency improvement	40-45% (2008-2025)	23%
Energy efficiency improvement	>1% annually (>10% in 2025, reference 2015)	2%
Electricity purchased from renewable sources	50% in 2025	8%
Reduction of emissions to air per unit of product (VOC, NO_x, SO_2)	40% in 2020 (reference 2015)	25%
Waste	80-90% recycled by 2020	83%
Water	Water risk assessments completed on 90% of selected sites by 2020	67%

Climate change & renewable energy

It is widely accepted that certain gases (e.g. carbon dioxide, methane, nitrous oxide) contribute significantly to climate change. These gases, which are also emitted due to a wide range of human activities, intensify the planet's natural greenhouse effect, causing global warming. DSM is deeply committed to combat climate change by reducing the impact of our own operations and in our supply chains, by enabling our customers through providing low-carbon products and solutions, and through advocating climate action.

To encourage investments in low-carbon or carbon-free technologies, DSM includes the financial impact of GHG emissions (scope 1 and 2) through internal carbon pricing in the valuations of large investment projects from 2016 onwards. For each large investment proposal at DSM, two business cases have to be presented - one with and one without an internal carbon price of € 50/t CO_2eq. See 'Stakeholder engagement' on page 24 to read more about DSM's activities in climate advocacy with governments, collaborative platforms and business networks on topics including renewable energy and carbon pricing.

Greenhouse-gas (GHG) emissions

DSM has applied the Greenhouse Gas Protocol, developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), to report GHG emissions (scope 1, 2 and 3) since 2008. In 2016, DSM further improved its GHG reporting by implementing the latest GHG Protocol scope 2 guidance (2015), updating all of its used emission factors and including all GHG emissions related to electricity and steam generated on-site that is exported to third parties. These improvements in the GHG reporting methodology contributed to an overall increase in our reported emissions.

By implementing the GHG Protocol scope 2 guidance, the scope 2 emissions from our purchased electricity are now also calculated using the so-called 'market-based' method, reflecting GHG emissions from electricity that DSM has purposefully chosen to contract, in addition to the 'location-based' method that reflects the average GHG emissions intensity of grids on which electricity consumption occurs.

"Everyone needs to act if we are going to successfully tackle climate change and transition to a low fossil-carbon economy. We made good progress in 2016 in improving DSM's environmental efficiency on a number of key measures, as well as taking a big step in renewable energy. Our innovative, sustainable solutions also enable customers to reduce their emissions in turn."

Feike Sijbesma, CEO/Chairman Managing Board

GHG emissions scope 1 & 2

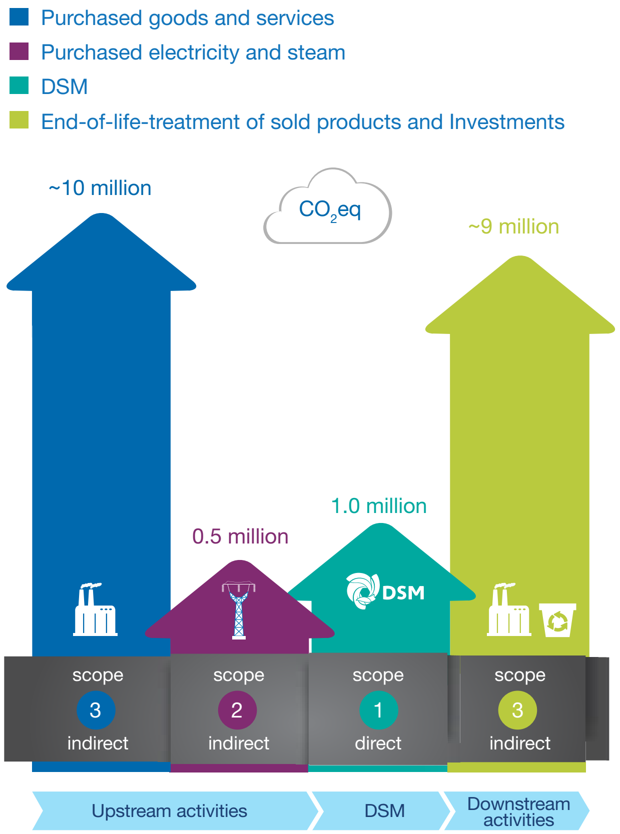
In 2016, DSM emitted a total of 1.5 million tons of CO_2eq (location-based), which is an increase of 0.4 million tons compared to 2015. The increase is mainly caused by the inclusion of recent acquisitions in DSM's environmental reporting (0.2 million tons CO_2eq), the inclusion of emissions related to electricity and steam generated on-site that is exported to third parties (0.1 million tons CO_2eq) and the improvements made to the reporting mentioned above. Our market-based scope 1 & 2 GHG emissions were 1.4 million tons.

GHG emissions related to on-site-generated electricity and steam exported to third parties made up 8% of total GHG emissions. The GHG emissions related to exported energy are excluded from the determination of DSM's own GHG efficiency improvement.

In 2016, DSM's GHG efficiency improved by 4% versus 2015 (both years location-based). A new high efficiency separation technology at DSM Nutritional Products in Dalry (UK) combined with higher production volumes, especially of products with a lower specific energy usage, contributed significantly to this improvement. Additional significant contributions came from our site in Grenzach (Germany), which had a higher utilization rate of its combined on-site heat and power plant.

Greenhouse-gas emissions in DSM's value chain

in million tons, CO_2eq



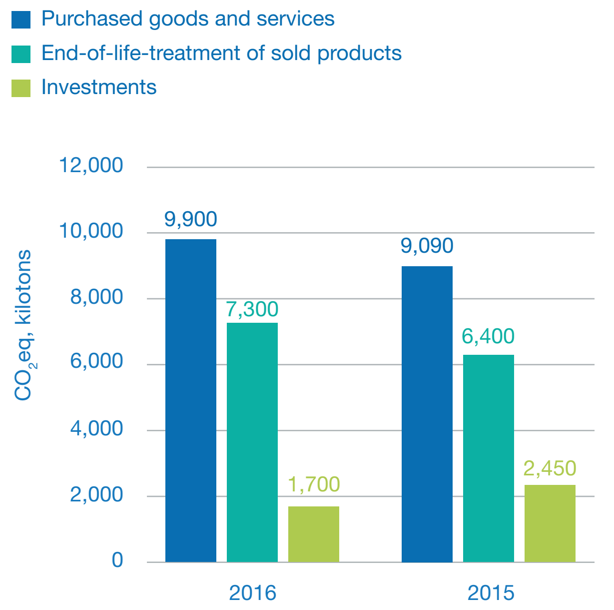
GHG emissions scope 3

The Greenhouse Gas Protocol, Corporate Value Chain Standard defines scope 3 emissions as all indirect emissions occurring in the value chain that are not included in scope 2, including both upstream and downstream emissions. As such, the reported scope 3 emissions cover many different aspects of the value chain and are therefore largely based on global averages, estimates, extrapolations and assumptions. DSM applies the WBCSD 'Guidance for Accounting & Reporting Corporate GHG emissions in the Chemical Sector Value Chain' to determine the scope 3 emissions per category.

In 2016, DSM determined its scope 3 emissions bottom-up and not by extrapolation as in 2015. DSM's scope 3 emissions in 2016 were slightly above 2015 levels. The increases in Purchased goods and services and End-of-life-treatment of sold products are mainly the result of higher production volumes. The Investments category went down due to fewer participations in 2016. Other changes are assumed to be relatively minor and within the limits of scope 3 reporting accuracy. It should be noted that DSM's scope 3 emissions for 2015 have been restated to correct for an omission following the deconsolidation of DSM Fibre Intermediates and Composite Resins last year.

DSM strives to achieve a sustained reduction of its carbon footprint across the value chain, for example through the DSM Supplier Sustainability Program (SSP). See also 'Stakeholder engagement – 'Suppliers' on page 31 to read more about our SSP strategy.

DSM's greenhouse-gas emissions (scope 3)



Avoided emissions
Avoided emissions are defined as the difference between the life cycle GHG emissions from the products and solutions of the reporting company, and comparable solutions (i.e. a conventional product or market average). We apply the WBCSD and International Council of Chemical Associations (ICCA) guidelines for accounting and reporting GHG emissions avoided along the value chain for the chemicals sector.

DSM is actively involved in the latest review and update of these guidelines. Their principles are applied as part of DSM's Brighter Living Solutions program, whereby one of the drivers is to have measurably lower GHG emissions along the life cycle. Applicable DSM products and solutions for which avoided GHG emissions may be evaluated include proprietary enzymes and cultures for use within the food and beverage industry, animal feed additives, and lightweight cargo nets made from Dyneema® fiber.

A further example where DSM helps its customers avoid emissions is the application of Uralac® Ultra powder coatings for heat-sensitive substrates such as wood, which can result in a reduction of up to 80% in the carbon footprint of the applied coating when compared to conventional technologies. With DSM's strategic focus on Brighter Living Solutions, we aim to continue increasing the number of innovations and sales in products and solutions that contribute to avoided GHG emissions.

"The longer we take to move to a low fossil-carbon economy, the higher the costs for future generations and for those already at risk today. Effective and inclusive carbon pricing can facilitate and speed up this transition. At DSM, we apply an internal price of €50 per ton CO_2eq. I am pleased to see that a rapidly growing movement of organizations, including thousands of companies, also sees climate action as both an inevitable opportunity and a moral responsibility."

Feike Sijbesma, Co-Chair Carbon Pricing Leadership Coalition

DSM's energy transition
DSM's total annual energy consumption increased from 20.9 to 22.6 petajoules in 2016. The increase is related to the inclusion of recent acquisitions in DSM's reported figures in 2016.

Improving energy efficiency is the most cost-effective way to reduce GHG emissions in our operations. DSM's energy roadmap prioritizes investments in energy-efficient technologies and practices that reduce emissions and costs. In 2016, DSM's energy efficiency improved by 2% compared to 2015. A multi-year energy efficiency improvement program is in place to obtain an annual improvement of at least 1%.

In 2016, DSM implemented various energy efficiency improvement projects and initiated new studies and projects that will deliver energy reductions in the years to come. These investments in 2016 amounted to €8.7 million and when fully implemented are expected to deliver around 1.5% in structural energy efficiency improvements, as well as an annual cost saving of approximately €2.3 million. The projects include both smaller operational and maintenance improvements, as well as the replacement of less efficient process equipment. The main energy efficiency improvements were achieved at two DSM Nutritional Products sites where older cooling equipment was replaced by state-of-the-art equipment, as well as by a process improvement project to replace a single-stage unit with a two-stage distillation unit at our hydrocolloids site in China.

Renewable energy
DSM is committed to the responsible, efficient use of electricity. We are a signatory to the Climate Group's RE100, which brings together the world's leading companies committed to sourcing 100% of their electricity from renewable sources at the earliest possible opportunity.

Our intermediate target for 2025 is for 50% of DSM's purchased electricity to be obtained from renewable resources. We do this by engaging in purchase power agreements, securing Renewable Electricity Certificates and increasing the amount of renewable electricity generated on-site. However, DSM is dependent on the availability of renewable electricity from the grid or through local electricity production. Regulations and policies on renewable energy vary from country to country, affecting our ability to scale up our procurement of electricity from renewable sources. Consequently we actively collaborate with authorities and other companies to jointly scale up the supply of electricity from renewable sources on the grid (also referred to as 'additionality'). In 2016, 8% of purchased electricity came from renewable sources. We took a big step in the year with DSM's participation in Windpark Krammer, see the case study on the next page.

Water security
Water and waste water
Water is essential for life. Global water demand has risen sharply during recent decades, while the availability of water resources is changing due to multiple factors. As a result, more and more regions face water stress, including regions in which DSM operates. Our water program focuses on identifying and mitigating water risks in these regions. DSM sites that are either located in areas with short- or long-term water scarcity risks or have waste water discharge levels above Best Available Techniques have to perform a water risk assessment and implement appropriate measures to mitigate adverse effects on water quality and availability. At the end of 2016, 67% of DSM's applicable sites had a valid water risk assessment in place as well as plans to execute the measures defined.

From 2016 onwards, DSM reports water consumption in addition to water use. Our water use includes water used for ‘once-through cooling’ that is returned to the original water source after use. Water consumption is the portion of water used that is not returned to the original water source after being withdrawn and as such is a better indicator with which to manage DSM's impact on water availability. Compared to 2015, water use was up 3% to 104 million m^3, the increase being almost entirely driven by a higher city water consumption due to the inclusion of new acquisitions in the reporting. DSM's water consumption was 22 million m^3 in 2016.

DSM’s water pollution reduction programs aim to reduce total water pollution, mainly through reductions in Chemical Oxygen Demand. Performance on this measure improved by 4% compared to 2015, largely as a result of improvements at our sites in Sisseln (Switzerland), Delft (Netherlands) and Wilmington (Massachusetts, USA).

Waste

As part of our ambitions to move toward a circular economy, we aim to reduce the amount of waste produced at DSM. The waste that is produced is preferably recycled; our recycling target helps us drive this. Landfilling waste is the least preferred alternative. Our definition for waste recycled is the percentage of total waste related to normal operations that is recycled, or, if that is not possible, incinerated off site with heat recovery. In 2016, this applied to 83% of DSM's waste, providing a good basis to reach the upper end of the targeted range by 2020.

Other emissions to air

Other emissions to air include VOC, NO_x and SO_2. While absolute emissions increased due to the inclusion of recent acquisitions in the scope for Planet reporting as stated above, DSM further reduced its other emissions to air per unit of product in 2016, thereby improving our efficiency in this regard. This came to a 25% reduction by the end of 2016, which is firmly on track toward our target of a 40% reduction by 2020. The main contribution to this improvement came from a DSM Dyneema site in China: 2016 was the first full year in which a new emission abatement system was operational. An overview of the absolute emissions can be found in the ‘Sustainability statements – Planet’ on page 128.

Biodiversity

DSM identifies and monitors protected areas in the vicinity of its sites and our impact on them. Sixty percent of our sites have been identified as being located in or adjacent to areas of high biodiversity value. In all cases, production sites are operating within applicable limits, as defined by local authorities. See also ‘Stakeholder engagement’ on page 24 and DSM’s position paper on Biodiversity on the company website.

Companies have scale to help transition to renewables

In the Netherlands, DSM has joined forces with AkzoNobel, Google and Philips in undertaking a long-term agreement to source power from local renewable energy projects. The first project the consortium has engaged in is a unique ‘bottom-up’ initiative – *Windpark Krammer* – in which local citizens have come together in cooperatives to drive the development of a wind farm in partnership with the four companies. This is the first time in the Netherlands that a group of multinational companies has teamed up with local citizens to create what is effectively a consumer-to-business energy partnership; the consortium’s participation is crucial to the project’s funding.

This bottom-up approach is an interesting, win-win model, because highly engaged individuals, industrial-scale users, windfarm developers and the achievement of the national Dutch renewable energy target all benefit.

When Windpark Krammer comes online in 2018, around 5% of its output will be used to provide local homes and small businesses with renewable power, while the remaining 95% will be used by the consortium’s four industrial partners. Once at full capacity, Windpark Krammer will supply DSM with 90GWh of renewable electricity annually – nearly 10% of the total amount of electricity DSM purchased in 2016.

Windpark Krammer is the largest citizen’s initiative in the Netherlands. The more than 4,000 members of the cooperatives and Zeeuwind and Deltawind have taken the initiative to develop the wind farm on and around the Krammersluizen in the Dutch province of Zeeland. The consortium partners have agreed to source a total of 350GWh a year of green electricity from the windpark, equivalent to the total annual consumption of 100,000 households.

Resource scarcity / Circular & bio-based economy

The world's growing population and expanding middle class are increasing the demand for food, materials, and energy. DSM is dedicated to securing the future availability of natural resources, and to unlocking more value from the limited resources that are available. In this regard, we support the inevitable transition the world must make toward a circular and bio-based economy, which requires a different way of thinking compared to linear value chains.

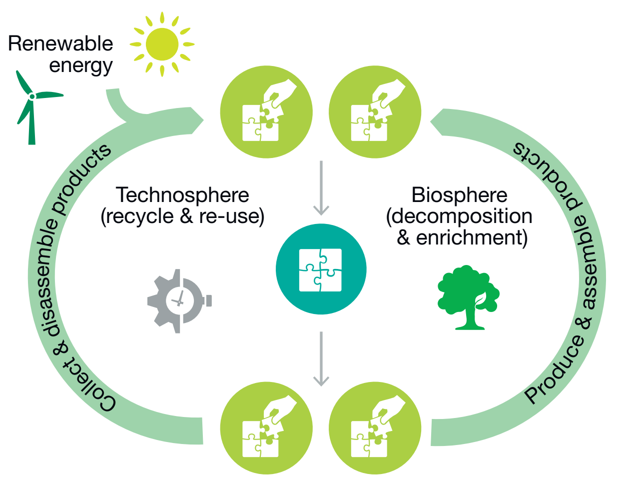
The Ellen MacArthur Foundation defines the circular economy as one which is "restorative and regenerative by design, and aims to keep products, components, and materials at their highest utility and value at all times." It is a continuous positive development cycle that preserves and enhances natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows.

DSM adopts a multi-faceted approach to the circular and bio-based economy. We are focused on exploring ways to:

- **Reduce** the use of critical resources
- **Enable** recycling and redesign with smart materials
- **Advocate** the circular and bio-based economy

We also consider the sharing economy as part of the circular economy. In this regard, we are looking into new business models and opportunities for our Materials businesses. The concept of increased joint ownership of products such as cars may lead to a reduced demand for such products in the future; this could present an opportunity for DSM's high-quality, longer-lasting solutions, as well as forming a risk for parts of our current product portfolio.

Circular economy



In 2016, DSM continued to pursue new circular and bio-based opportunities within its businesses in the framework of its Brighter Living Solutions program, as well as in DSM Bio-based Products & Services, and new ventures such as DSM-Niaga. See also 'Stakeholder engagement' on page 24, 'Review of business - Materials' and 'Review of business - Innovation Center' from page 74 and page 82 onwards respectively.

Renewable raw materials

DSM views the use of renewable resources as an essential step in securing future resource availability. In addition to energy from renewable sources, DSM is looking toward opportunities in renewable raw materials. Our memberships of the Ellen MacArthur Foundation CE100 and the Low Carbon Technology Partnership, led by the WBCSD, provide insight into new ways in which DSM can incorporate renewable raw materials into its processes. These collaborations also help position the role of waste streams and low carbon-intensive fuels as viable alternatives. Our Niaga collaboration and POET-DSM partnership continue to demonstrate this.

DSM selects renewable raw material suppliers where feasible. Renewable raw materials used by DSM include waste from the agricultural industry, yeasts and enzymes, carbohydrates, and natural oils and acids. In 2016, DSM's spend on raw materials relating to renewable raw materials rose to 16.5% (2015: 16%) due to increased demand for our nutrition and health products. See also DSM's position paper on sustainable biomass on the company website.

Product Stewardship

DSM's sustainability strategy is supported by Product Stewardship, whereby we provide transparency and clarity on substances and their safe production, processing, use and disposal. DSM recognizes both the impact and the benefit of a Product Stewardship strategy as part of our own responsibility in the full value chain, in line with the principles of Responsible Care.

Last year, DSM raised its ambitions in Product Stewardship to address societal and external opportunities, requirements and expectations, in line with our sustainability programs. Our vision for Product Stewardship is for it to be part of 'our way of working'. In 2016, the following progress was made in this area:

- A global competence plan based on a SWOT analysis was prepared in order to give direction and provide context on the role of Product Stewardship.
- We initiated a continuous improvement program to control Substances of Very High Concern (SVHC) in DSM products and within the supply chain.
- A 'Product Stewardship Network' was established at central level, coordinating the efforts of the Product Stewardship groups within our business groups.
- Our efforts were recognized by Chemical Watch in their special report 'Business Guide to Safer Chemicals'.

Regarding the control of SVHCs, DSM assesses all substances of which more than 1 ton per year is used in its processes so as to identify and monitor long-term human and environmental hazards. This assessment will be completed by the end of 2020. Identified SVHCs need to be reported in a DSM Priority Substance List and their use challenged in an internal justification process involving a multidisciplinary team.

The final goal is the phase-out of toxic substances, not only from DSM's own portfolio but from the full life cycle of its products, in line with the company's commitment to bring more sustainable alternatives to the market. Where substitution is not currently possible, a risk assessment is performed following standard industry procedures. If safe use cannot be shown, the SVHC is prohibited from further use or production within DSM.

DSM is working to meet the 2018 deadline of the EU regulation on REACH, by registering all substances of which between 1 and 100 metric tons per year is produced. At the same time, we continuously update existing dossiers and support EU member states in evaluating an increasing number of substances. We also engage with our raw materials suppliers to guarantee sustainable business through REACH compliance along the value chain.

DSM supports the UN initiative to implement a Globally Harmonized System of classification and labeling of chemicals, for which an internal e-learning has been developed. We closely follow developments on health exposure scenarios for mixtures that need to be implemented in the industry's product safety systems.

Profit highlights

> *“ We posted good results for DSM in 2016, well ahead of our initial ambitions for this first year of our strategic period. While we still have much to do in the coming years, we have established a strong foundation from which to continue to grow.”*
>
> *Geraldine Matchett, CFO*

Our Strategy 2018 is underpinned by two mid-term headline financial targets: growth in Adjusted EBITDA and ROCE. These are based on our ability to outgrow our markets and at the same time deliver significant structural cost savings and improvement actions, underscored by disciplined capital allocation across the company.

I am pleased to say that in 2016, the first year of this period, we have posted financial results that are considerably ahead of our mid-term targets, with an Adjusted EBITDA growth of 17% and ROCE stepping up from 7.6% to 10.4%. Net sales came in at €7,920 million, representing a top-line organic growth for the company of 4%, with both our Nutrition and Materials businesses making a strong contribution. We also made good progress in terms of profitability, with robust margin development in Nutrition and especially so in Materials. The clear step-up in ROCE – the return we deliver on each euro we employ – was driven by a higher EBIT. On the basis of these results, we are pleased to propose an increased dividend of €1.75 for the year, subject to shareholder approval.

The cost-saving and improvement programs we initiated in 2015 have been a major area of focus this year. A lot has been achieved and we remain firmly on track. The organizational and operational changes being implemented go beyond cost-savings alone; the way we are organized, the things we do and the processes we follow are being reshaped for agility and growth.

We have continued to invest in our businesses and in growth through 2016, committing around 6% of our sales to carefully selected capital projects. As a science-based company, R&D and innovation remains fundamental to our ability to deliver solutions that make a real difference to our customers’ businesses, and to their customers in turn. We continued to spend in this area to stay ahead of the game, albeit with a clear focus on the optimum impact of our investments.

One of our key focus areas has been on improving our working capital as a percentage of sales. At the end of 2016, this was 18.4%, which is better than our aspiration level of below 20%. Capital efficiency is a key driver of cash generation; in 2016 we undertook a number of improvement projects in this area throughout DSM. One of these has been to take a more integrated approach to business planning, in particular in our Nutrition cluster. Holistically addressing processes instead of approaching them as a series of individual steps has resulted in clear improvements in inventory management, production and distribution efficiencies.

Again in line with Strategy 2018, we took a first step toward monetizing our key joint venture partnerships with our participation in the very successful IPO of Patheon N.V. in July 2016. This resulted in a first gain and cash in-flow for DSM in 2016 in excess of €200 million and has opened the way for further steps in future with regards to our remaining 34% stake.

During the year, we also successfully issued a €750 million ten-year bond with a coupon of 0.75%. Favorable market conditions allowed us to lock-in low interest rates taking into account the upcoming maturing of a €750 million bond in 2017.

In achieving these results, one of the things that has impressed me most has been the dedication and unwavering commitment of the thousands of DSM employees around the world. My colleagues and I on the Executive Committee are well aware that our company is undergoing a period of vital organizational transformation. This internal process could have proved a distraction for many in our company. Instead, what we have seen has been a continued clear commitment to focus on our markets and on customer relationships and customer needs. This deep-seated dedication has paid off in 2016, and underlies the valuable relations we have with our partners in the value chain.

Profit in 2016

Financial results

Within the Profit dimension of DSM's Triple P approach, DSM delivers a sustainable financial return. This ensures business continuity and allows the company to grow, while at the same time providing a good financial return to its shareholders. This chapter reports DSM's financial performance and provides an overview of the key financial metrics of the company. A model of How DSM creates value for its stakeholders through the financial, intellectual and manufactured capitals is given on page 20.

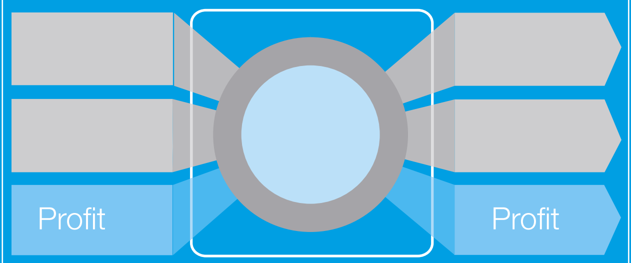
Income statement

x €million	2016	2015
Net sales[1]	7,920	7,722
Adjusted EBITDA[1]	**1,262**	**1,075**
EBITDA[1]	**1,174**	**956**
Adjusted operating profit[1]	**791**	**573**
Operating profit[1]	**685**	**362**
Adjusted net profit[1]	**512**	**383**
Net profit[1]	**649**	**184**
Adjusted net profit from discontinued operations	-	33
Total APM adjustments	109	(328)
Total net profit attributable to equity holders of Koninklijke DSM N.V.	**621**	**88**
ROCE (in %)[1]	10.4	7.6
Adjusted EBITDA margin, (in %)[1]	15.9	13.9

[1] From continuing operations

In presenting and discussing DSM's financial position, operating results and cash flows, DSM uses certain Alternative performance measures (APMs) not defined by IFRS. These APMs are used because they are an important measure of DSM's business development and DSM's management performance. A full reconciliation of IFRS performance measures to the APMs is given in the 'Alternative performance measures' on page 144.

How DSM creates value



Organic sales growth

4%

Higher-margin innovation sales

22%

Capital expenditure (cash-based), total DSM (in million)

€ 475

Cash from operating activities (in million)

€ 1,018

Adjusted EBITDA growth

17%

ROCE growth (in bps)

280

Dividend per ordinary share

€ 1.75

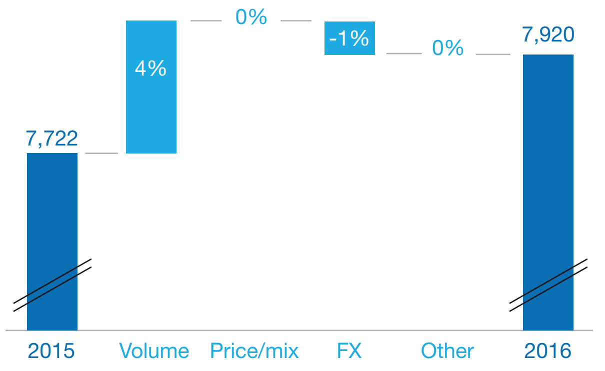
Net sales and Adjusted EBITDA

At €7,920 million, net sales from continuing operations in 2016 were 3% higher than in 2015 (€7,722 million), while organic growth was 4%. Volume development accounted for a 4% improvement, driven by both Nutrition and Materials, while price/mix was on average flat compared to 2015. Exchange rate fluctuations had a negative impact of 1%, while other effects balanced each other out.

	Net sales			Adjusted EBITDA		
x € million	**2016**	2015	% change	**2016**	2015	% change
DSM, continuing operations	**7,920**	**7,722**	**3%**	**1,262**	**1,075**	**17%**
Nutrition	5,169	4,963	4%	931	822	13%
Materials	2,513	2,528	(1%)	435	384	13%
Innovation Center	167	155	8%	1	(9)	
Corporate Activities	71	76		(105)	(122)	

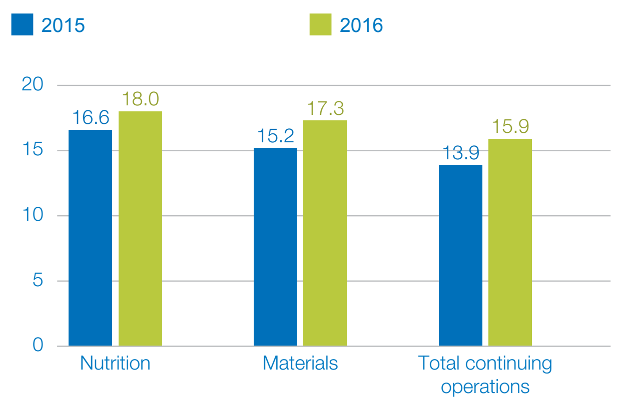
Net sales bridge 2016

x € million



Adjusted EBITDA margin

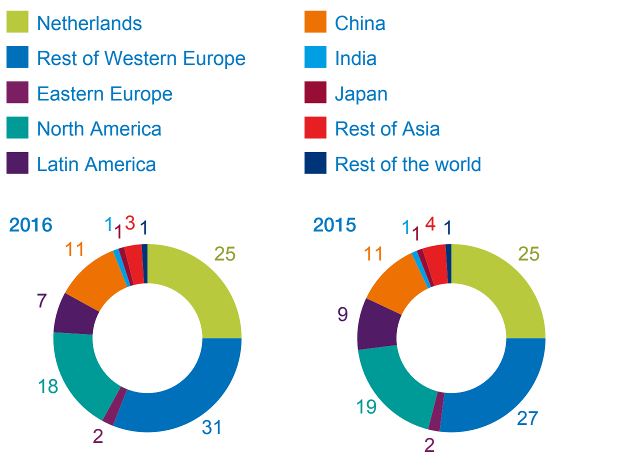
in %



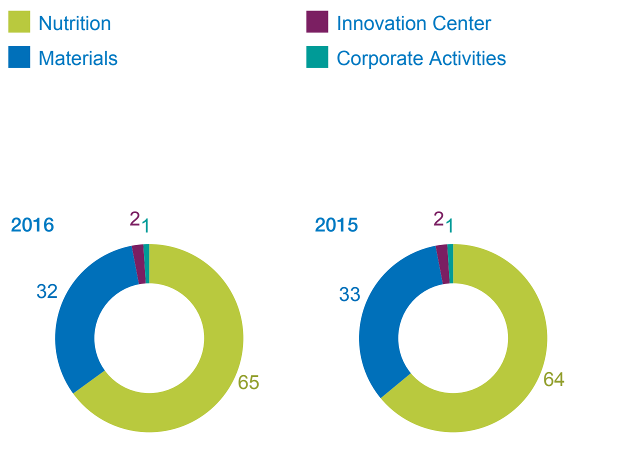
Adjusted EBITDA (Adjusted operating profit from continuing operations before depreciation and amortization) increased by a significant 17% or €187 million, from €1,075 million in 2015 to €1,262 million in 2016. Adjusted EBITDA in Nutrition was up 13% versus 2015, with all businesses contributing well to this growth. Profitability also benefited from the efficiency and cost-saving programs. In Materials, Adjusted EBITDA was also up 13%, driven by strong volume growth in higher margin specialties, the benefits of the efficiency and cost-saving programs and the support from low input costs. DSM's overall Adjusted EBITDA margin was also up at 15.9% in 2016 (2015: 13.9%).

Adjusted operating profit from continuing operations rose from €573 million in 2015 to €791 million in 2016, up 38%.

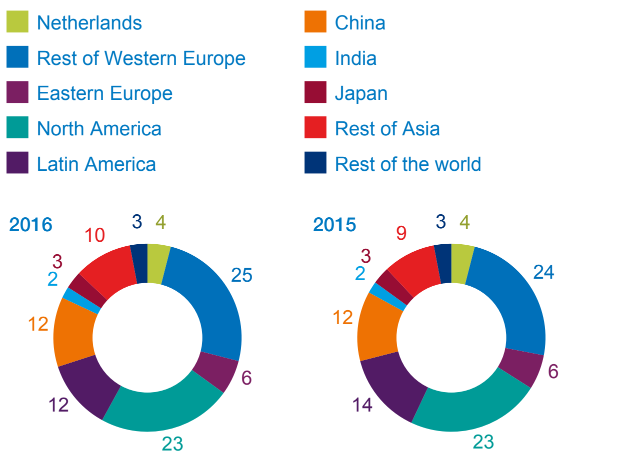
Net sales by origin, continuing operations
in %



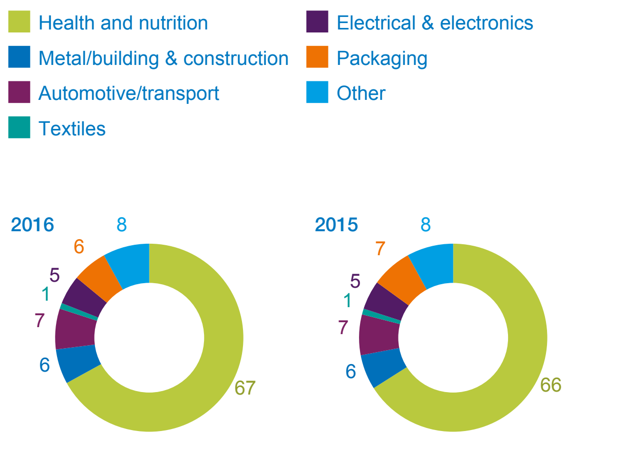
Net sales by business segment, continuing operations
in %



Net sales by destination, continuing operations
in %



Net sales by end-use market, continuing operations
in %



Net profit
Net profit attributable to equity holders of DSM increased by € 533 million to € 621 million. This increase was mainly a result of higher Adjusted EBITDA (up € 187 million) and differences in APM adjustments, see below. Expressed per ordinary share, net earnings amounted to € 3.52 in 2016 (2015: € 0.45).

Financial income and expense decreased by € 41 million compared to the previous year to € 133 million. This was mainly the consequence of more favorable hedge results and lower interest expenses.

The effective tax rate on the adjusted result from continuing operations for 2016 was 18% (2015: 23%). This substantial decrease was due among other factors to a better geographical mix and the fact that 2015 included a one-off tax settlement related to the internal transfer of a business.

Adjustments made in arriving at DSM's Alternative performance measures (APM adjustments)
Total APM adjustments for the full year amounted to a profit of € 109 million, consisting of a profit regarding associates and joint ventures of € 212 million (mainly due to the gain of € 232 million on the IPO of Patheon N.V.), offset by € 101 million in restructuring costs related to the ongoing cost-reduction programs, € 18 million impairments and € 15 million acquisition/divestment-related and other costs, with a tax benefit of € 31 million.

Cash flow statement

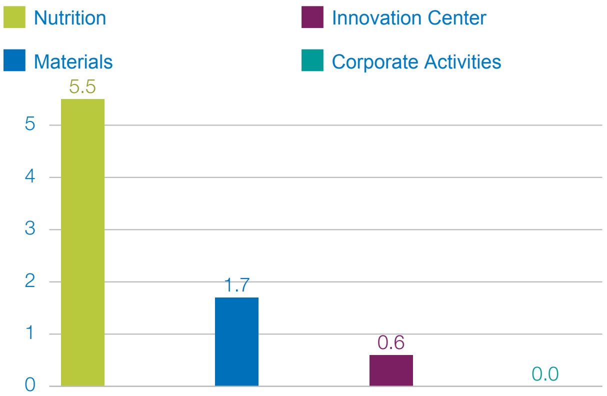
x € million	2016	2015
Cash and cash equivalents at 1 January	**665**	**669**
Cash flow provided by operating activities	1,018	696
of which provided by continuing operations	*1,018*	*800*
Cash used in investing activities	(1,194)	(275)
Cash from / used in financing activities	113	(440)
Effect of exchange differences	2	15
Cash and cash equivalents at 31 December	**604**	**665**

Cash flow provided by operating activities consists of the EBITDA for the year (€ 1,146 million) less various cash-out items including income tax of € 77 million and changes in working capital of € 89 million. Our focus on cash flow resulted in a strong full-year operating cash flow from continuing operations of € 1,018 million. See also ‘Consolidated financial statements’ on page 129.

The cash used in investing activities included capital expenditures (€ 476 million) and the increase of fixed-term deposits (€ 936 million, see Note 14 'Current investments'), partly offset by the proceeds from disposals (€ 80 million) and the dividend received from associated companies (€ 152 million), mainly relating to the IPO of Patheon N.V.

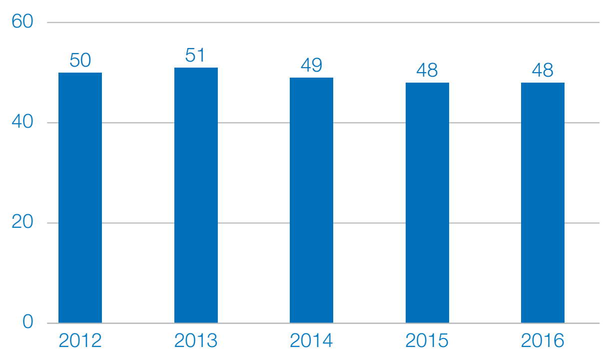
The cash from financing activities consisted mainly of the increase in long-term loans (€ 745 million), partly offset by dividend paid (€ 190 million), interest paid (€ 151 million) and repurchase of shares (€ 273 million). For the full cash flow statement, see page 139.

Capital employed per business segment at 31 December 2016, continuing operations x € billion



Equity at 31 December

as a % of balance sheet total



Balance sheet

The balance sheet total (total assets) reached € 13.0 billion at year-end (2015: € 11.7 billion). Equity increased by € 549 million compared to the position at the end of 2015. This increase was due to the fact that the net profit for the year, the net exchange differences and the proceeds from reissued shares were higher than the dividend and the repurchase of shares. Equity as a percentage of total assets remained 48%.

Compared to year-end 2015, net debt decreased by € 251 million to € 2,070 million. The gearing at year-end was 25%, a decrease of 4% compared to 2015.

Capital expenditure on intangible assets and property, plant and equipment amounted to € 485 million in 2016 (€ 475 million on a cash basis), which was around the same level as amortization and depreciation.

Total working capital amounted to € 1,481 million compared to € 1,343 million at year-end 2015, which represents 18.4% as a percentage of annualized fourth quarter 2016 sales. Total working capital at year-end 2016 included cash-related liabilities of joint ventures and associates of € 62 million, which is € 75 million lower than 2015. Excluding these liabilities, this ratio amounted to 19.1%. The operating working capital (continuing operations before reclassification to 'held for sale') was € 117 million higher than in the previous year and came to 24% of annualized net sales (2015: 24%).

Cash and cash equivalents came to € 604 million at the end of the year; including current investments, this came to € 1,568 million (2015: € 674 million). The increase was mainly attributable to the € 750 million bond issued in September 2016, which took advantage of favorable market conditions to allow DSM to lock in low interest rates taking into account the maturing of a € 750 million bond in 2017.

Balance sheet profile

	2016		2015	
	x € million	in %	x € million	in %
Intangible assets	3,188	24	3,228	27
Property, plant and equipment	3,325	26	3,171	27
Other non-current assets	1,404	11	1,429	12
Cash and cash equivalents	604	5	665	6
Other current assets	4,437	34	3,250	28
Total assets	**12,958**	**100**	**11,743**	**100**
Equity	6,180	48	5,631	48
Provisions	182	1	139	1
Other non-current liabilities	3,478	27	3,600	31
Other current liabilities	3,118	24	2,373	20
Total liabilities	**12,958**	**100**	**11,743**	**100**

Outlook 2017

DSM aims to deliver high single-digit percentage Adjusted EBITDA growth and high double-digit bps ROCE growth in line with the targets set out in its Strategy 2018.

Review of business in 2016

In 2016, DSM's activities were grouped into three clusters: Nutrition, Materials and Innovation Center. In addition, DSM reports separately on Corporate Activities. Results presented in this section (and elsewhere in the management report) relate to consolidated activities only (therefore non-consolidated partnerships are excluded).

Net sales

x €million	2016	2015
Nutrition	5,169	4,963
Materials	2,513	2,528
Innovation Center	167	155
Corporate Activities	71	76
Total continuing operations	**7,920**	**7,722**
Discontinued operations	-	1,213
Total DSM	**7,920**	**8,935**

Adjusted operating profit (EBIT)

x €million	2016	2015
Nutrition	645	535
Materials	311	250
Innovation Center	(24)	(43)
Corporate Activities	(141)	(169)
Total continuing operations	**791**	**573**
Discontinued operations	-	77
Total DSM	**791**	**650**

Adjusted EBITDA

x €million	2016	2015
Nutrition	931	822
Materials	435	384
Innovation Center	1	(9)
Corporate Activities	(105)	(122)
Total continuing operations	**1,262**	**1,075**
Discontinued operations	-	95
Total DSM	**1,262**	**1,170**

Capital employed at 31 December

x €million	2016	2015
Nutrition	5,537	5,309
Materials	1,807	1,723
Innovation Center	576	560
Corporate Activities	(31)	(39)
Total continuing operations	**7,889**	**7,553**
Discontinued operations	-	-
Total DSM	**7,889**	**7,553**

Adjusted EBITDA margin

in %	2016	2015
Nutrition	18.0	16.6
Materials	17.3	15.2
Total continuing operations	**15.9**	**13.9**
Discontinued operations	-	7.8
Total DSM	**15.9**	**13.1**

ROCE

in %	2016	2015
Nutrition	12.0	10.3
Materials	17.6	14.4
Total continuing operations	**10.4**	**7.6**
Discontinued operations	-	19.0
Total DSM	**10.4**	**8.2**

Capital expenditure

x € million	2016	2015
Nutrition	331	322
Materials	106	98
Innovation Center	32	34
Corporate Activities	16	24
Total continuing operations	**485**	**478**
Discontinued operations	-	92
Total, accounting based	**485**	**570**
Non-cash items	(9)	(27)
Customer funding	(1)	(7)
Total, cash based	**475**	**536**

R&D expenditure (including associated IP expenditure)

	x € million		as % of net sales	
	2016	2015	2016	2015
Nutrition	205	223	4.0	4.5
Materials	124	143	4.9	5.7
Innovation Center	75	82	44.9	52.9
Corporate Activities	22	16	31.0	21.1
Total continuing operations	**426**	**464**	**5.4**	**6.0**

Workforce at 31 December

headcount	2016	2015[1]
Nutrition	13,260	12,978
Materials	4,460	4,472
Innovation Center	619	630
Corporate Activities	2,447	2,716
Total continuing operations	**20,786**	**20,796**
Discontinued operations	-	-
Total DSM	**20,786**	**20,796**

[1] Corrected for comparability

Nutrition highlights

> *" Nutrition performed well in 2016, with good growth in our Animal Nutrition & Health business, improved growth in Human Nutrition & Health, and strong demand for DSM Food Specialties' innovative enzymes portfolio. "*
>
> *Stephan Tanda, DSM Managing Board*

The leaders of DSM's Nutrition businesses, from left to right: David Blakemore, Stephan Tanda, Ilona Haaijer, Jeremy Xu, Chris Goppelsroeder

Our commitment to deliver safe, reliable, quality ingredients and solutions that support health and well-being was underlined by a number of positive developments in 2016. We improved our manufacturing footprint further, including the opening of a new vitamin B6 plant in China, and strengthened our business leadership bench with the appointment of Jeremy Xu and David Blakemore to head up our Human Nutrition & Health and Animal Nutrition & Health businesses, respectively.

In animal nutrition the positive sales trend of 2015 continued. Our customers are looking for solutions that boost performance while reducing environmental impact and protecting their margins. In 2016, we saw a strong uptake for feed enzymes and eubiotics as producers increasingly sought alternatives to antibiotic growth promoters. Meanwhile our quest for transformational new approaches continued with our major innovation projects Clean Cow and, together with partner Evonik, Green Ocean – both designed to help meet the demand for macronutrients while substantially reducing the environmental impact of farming. With our business-to-farmer (B2F) initiative, we targeted a new customer segment with a new brand in China, which has been well received.

In human nutrition we returned to good growth, building on the work we had done in 2015. A highlight was the further development of our i-Health range of dietary supplements. A further major achievement was the launch of MEG-3® Ultra from our new facility with 3C Technology in Canada, which has the potential to reshape the omega-3 category.

We welcome the growing influence of the first 1,000 Days initiative; everybody's future is essentially determined in the critical period from conception to two years of age. We remain as committed as ever to help deliver high-quality, cost-effective nutrition to the four billion people living at the Base of the Pyramid and are honored to be able to participate in Africa Improved Foods at the invitation of the Government of Rwanda.

Personal Care & Aroma Ingredients had a strong 2016, with organic growth across all segments, supported by product innovation and deep customer and consumer insights.

Our Food Specialties business also had a good year. The drive to reduce the levels of salt, fat, sugar, and simple carbohydrates in processed foods is creating new opportunities for DSM Food Specialties' cultures and enzymes portfolio. The rise in demand for our innovative hydrocolloids portfolio is especially positive. Growing interest in lactose-free dairy products is also fueling growth.

Nutrition

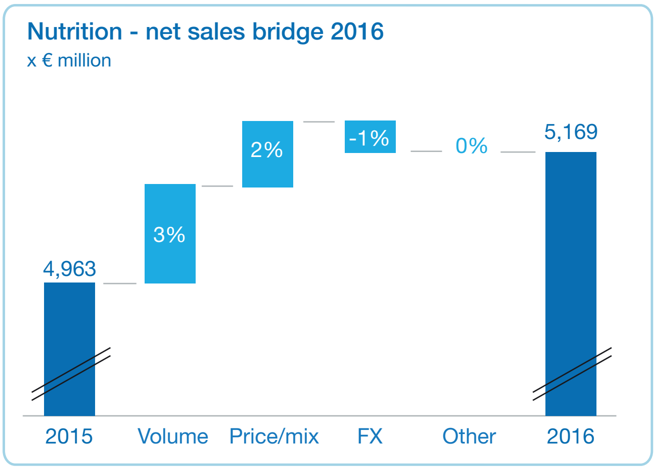
x € million	2016	2015
Net sales:		
DSM Nutritional Products:[1]		
- Animal Nutrition & Health	2,399	2,269
- Human Nutrition & Health	1,823	1,741
- Personal Care & Aroma Ingredients	337	316
- Other	74	113
	4,633	4,439
DSM Food Specialties	536	524
Total	**5,169**	**4,963**
Organic sales growth (in %)	5	6
Adjusted EBITDA	931	822
Adjusted operating profit	645	535
Capital expenditure	331	322
Capital employed at 31 December	5,537	5,309
ROCE (in %)	12.0	10.3
Adjusted EBITDA margin (in %)	18.0	16.6
R&D expenditure	205	223
Workforce at 31 December (headcount)	13,260	12,978

[1] As of 2016, the results of DSM Nutritional Products are presented in four reporting units: Animal Nutrition & Health, Human Nutrition & Health, Personal Care & Aroma Ingredients and Other. Other covers pharma and custom manufacturing & services activities previously reported mainly in Animal Nutrition & Health.

Business

The Nutrition cluster comprises DSM Nutritional Products and DSM Food Specialties. These businesses serve the global industries for animal feed, food and beverages, pharmaceuticals, infant nutrition, dietary supplements and personal care. DSM is uniquely positioned in all steps of the feed and food value chains: the production of pure active ingredients, their incorporation into sophisticated forms, and the provision of tailored premixes and forward solutions. With a global and highly diversified portfolio of products, services and end-markets, DSM provides innovative solutions to the benefit of customers and other stakeholders worldwide. For more information on DSM's Nutrition cluster and its portfolio of businesses and products as well as their value chains, please refer to DSM's Factbook on the company website.

Nutrition cluster performance



DSM's Nutrition cluster had a strong year in 2016. Total sales amounted to € 5,169 million in 2016, up 4% from € 4,963 million in the previous year. Organic sales growth was 5%, driven by higher volumes and price/mix. Animal Nutrition & Health had a strong year with 8% organic sales growth, driven by strong volume growth in all regions with the exception of Latin America, due to the weak economic conditions in that region. Human Nutrition & Health delivered a significant step-up in organic growth (4%) in 2016 versus recent years. This highlights the successful implementation of the strategy to drive above-market growth through new market initiatives and innovation.

Adjusted EBITDA was up 13% versus 2015 to € 931 million (2015: € 822 million), with all businesses contributing well to this growth. Adjusted EBITDA also benefited from the efficiency and cost-saving programs.

Trends

The key global trends in nutrition and health continued to fuel the growth of our Nutrition business in 2016. Continued rapid population growth accompanied by accelerating urbanization is driving demand for convenience and processed foods that are safe, healthy, nutritious, affordable, and sustainable. This presents attractive growth opportunities for DSM, with our ability to deliver innovative nutrition solutions tailored to precise customer needs the world over.

Rising standards of living and changing dietary patterns, especially in emerging economies, are stimulating demand for fish, meat, poultry and dairy products. This calls for more efficient but also more sustainable production of animal protein, respecting animal welfare, producers' livelihoods and the environment.

Life expectancy continues to increase worldwide. Growing understanding of the role of nutrition in supporting health and well-being throughout the lifespan is encouraging healthier food choices. Well-informed consumers are looking for products with reduced levels of sugar, salt and trans fats as they begin to explore the possibilities of personalized nutrition. At the same time, new scientific evidence arguing for differentiated nutrient intake patterns across the lifespan is creating new possibilities for DSM, which can offer innovative approaches to food fortification and dietary supplementation tailored to the needs of highly specific demographic groups. Increasingly consumers, especially in the developed world, are searching for foods that are perceived as not only nutritious but also authentic, natural, minimally processed and 'free from'. This poses new challenges to our customers. DSM can be a key partner here in formulating solutions that meet the needs of this consumer group.

The global need to address malnutrition is undeniable – in developed as well as developing countries. The importance of good nutrition during the first 1,000 days of life – from conception to a child's second birthday – is achieving increasing recognition worldwide, for unparalleled growth occurs during this period, and inadequate nutrition at this time leads to adverse, lifelong consequences. Women of child-bearing age, as well as pregnant and lactating mothers, need special support. Fortified foods and supplements can play a valuable role here in contexts where available diets are inadequate.

Public concerns regarding food safety, quality, animal welfare and sustainability continue to foster a stricter regulatory climate. This provides new openings for DSM, with our science-driven approach, our unrelenting focus on sustainability, and our rigorous adherence to the highest production standards. Health authorities and customers alike value our quality and safety protocols and our continuous drive to exceed our own high requirements, as well as those stipulated by third parties.

Our customers are seeking not just product safety, quality and reliability but also the transformational product innovations that offer them a competitive edge. We expect the search for customized solutions based on deeper scientific and marketing insights to continue unabated.

Sustainability

Even as customers look for ever higher product differentiation and consumers for ever stronger product safety assurances, the world's focus on sustainability continues to grow. Sustainability is one of the key business drivers in DSM's Nutrition markets. The nutritional requirements of an expanding population place vast demands on the planet's ecosystems. Our Nutrition cluster delivers solutions that seek to meet the changing needs of the world's population while reducing the environmental impact of our operations and those of our customers.

Nutrition is a vital precondition for achieving 8 of the 17 Sustainable Development Goals (SDGs), most directly supporting SDG 2 (Zero Hunger). We see good nutrition throughout the course of life as a prerequisite for achieving full physical, mental and economic potential as well as maintaining health and well-being. We also welcome the new scientific focus on the changing nutrient requirements that individuals experience at different stages of their lives. We regard eliminating the scourge of malnutrition as a key societal priority and a shared global responsibility in which we gladly play our part. We help deliver better nutrition to society's most vulnerable groups, and we wholeheartedly endorse the 1,000 Days movement. Our business serving the four billion who live at the Base of the Pyramid continues to grow, helping to make safe, nutritious and affordable foods available to those with the slimmest economic means.

DSM is proud of its strategic partnership with the UN World Food Programme. Dedicated to 'Improving Nutrition, Improving Lives', this partnership provides food aid and development assistance to the world's hungry and also stimulates the establishment and nurturing of sustainable and self-supporting commercial nutrition business models in the developing world. Today, DSM reaches more than 28 million people per year with improved nutrition through the partnership. See 'Nourishing the Base of the Pyramid' on page 11 and 'Cross-sector nutrition partnerships' on page 36.

Strategy

The Nutrition cluster's unique business model aims to capture opportunities arising from global megatrends by combining production capabilities worldwide with customized local formulations. DSM delivers a broad portfolio of high-quality, competitive active ingredients for the nutrition industry with global reach at scale. At the same time, we offer maximum differentiation through industry and segment-specific formulations. As a local solutions provider with strong market intimacy, we base our growth on delivering customer-driven solutions.

DSM has developed into one of the strongest players in the industry by addressing growth opportunities through expanding and extending its offering across the value chain. We are active in Nutrition in over 60 countries, with unparalleled customer access, a complete product portfolio, and advanced skills and capabilities. We have continued to expand our premix footprint, especially in emerging economies. In 2016, we opened a new facility in Indonesia and expanded a number of existing facilities.

Over recent years, we have further expanded our product portfolio in Nutrition, adding capabilities in cultures, textures, trace minerals and marine and microbial polyunsaturated fatty acids to complement our unrivalled position in vitamins, carotenoids, eubiotics, enzymes and yeasts. Pectin-derived hydrocolloids and fermented gellan gum, which offer texturing solutions for reduced-sugar product recipes, are a highly attractive growth market. Rapidly increasing demand for lactose-free and reduced-sugar dairy products, meanwhile, is driving strong sales of our Maxilact® enzyme.

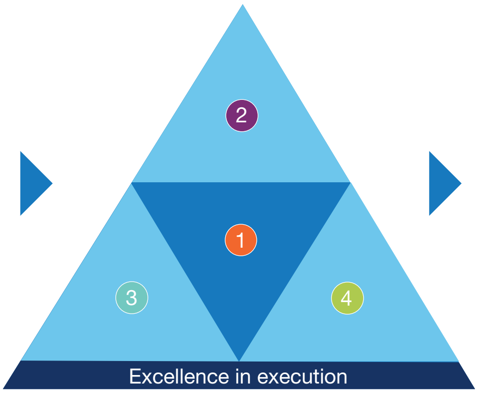
The combination of our strong global position and integrated business model has enabled DSM to become a leader in quality and innovation, with deep regulatory, technical and sustainability expertise and a clear understanding of customer and consumer needs, as well as regular investment in quality management.

Nutrition strategy 2018: global products and local solutions

Growth acceleration and sustainable innovations

1. Expand the core
2. Add new products & solutions
3. Expand in new segments/regions
4. New business models

- Reducing costs and increasing productivity
- Driving cash generation
- Increasing capital efficiency



Aspirations 2018 underpinning Group targets

- Above-market sales growth (at stable prices)
- High single-digit percentage annual Adjusted EBITDA growth
- Adjusted EBITDA margins: 18-20% over the period
- Annual ROCE growth: high double-digit bps increase

Going forward, we aim to drive profitable growth in Nutrition by leveraging the portfolio that has been created following a number of acquisitions in recent years. We are driving top- and bottom-line growth by:

- expanding our core capabilities and bringing them to more of the markets and territories we serve. In 2016, we opened a new, highly efficient and low eco-footprint production facility for vitamin B6 in China. Also in China, we announced the expansion of our gellan gum and pectin facilities;
- broadening and deepening our portfolio with new products and solutions, making full use of our expertise in sustainable innovation. One area is, for example, in eubiotics for antibiotic-free poultry – a trend which is gaining traction, as consumers are increasingly avoiding animal protein products produced with growth-promoting antibiotics. Another is the trend toward sugar reduction, and we continued to make good progress in the development of fermentative stevia;
- opening new segments and regions for our business – a good example being our investment in a new omega-3 concentration facility in Mulgrave (Canada); and
- developing new business models to increase market share, such as the implementation of an approach to sell directly to mid-sized swine and poultry farmers in China with a dedicated brand and distribution.

Our business strategy to accelerate organic sales growth is supported by cost savings and operational excellence measures to boost efficiency and productivity and drive cash generation. The cluster continued the implementation of a performance improvement program, which is based on the DSM manufacturing culture of continuous improvement and focuses on savings in purchasing, reduction of fixed costs, and gains in throughput and efficiency.

This improvement program targets cost savings versus 2015 of € 130-150 million by 2018. The Nutrition cluster is also benefiting from the DSM-wide adjustment of its organizational and operating model, allowing it to focus more on serving its customers and markets. Together with increased capital efficiency, the cluster aims to deliver improved financial returns.

DSM takes a balanced view of its Nutrition business. Our strategy strives to maximize the opportunities arising from our portfolio and the key market and societal trends in nutrition, while recognizing, anticipating and mitigating the risks that these global developments can also pose to our product-market combinations or business progress. For Nutrition, these potentially include: longer-term changes in food preferences and food systems; changes in preference for dietary supplements; commoditization of nutritional ingredients; the global or regional spread of infectious diseases in animals; our ability to develop, bring to market and exploit promising innovations; and the effects of geopolitical and macro-economic developments. For more information on how DSM manages risks, see 'Risk management' on page 102.

DSM Nutritional Products

DSM Nutritional Products has three market-facing entities: Animal Nutrition & Health, Human Nutrition & Health and Personal Care & Aroma Ingredients. DSM Nutritional Products achieved total sales of €4,633 million in 2016; in 2015 this was €4,439 million.

> "DSM is uniquely positioned in the worldwide markets for nutritional ingredients and is investing heavily in innovation. This provides us with a fantastic foundation for further growth and to make a real difference to our customers and their businesses. Through them, we bring better nutrition to more people, more sustainably than ever before."
>
> Chris Goppelsroeder, DSM Executive Committee

Animal Nutrition & Health

Highlights 2016

- Strong organic growth
- Strong demand for specialty solutions such as feed enzymes, Hy-D and carotenoids
- Pre-marketing work started on Green Ocean and Clean Cow initiatives

The Animal Nutrition & Health business achieved sales of €2,399 million in 2016 versus €2,269 million in 2015.

RONOZYME® RumiStar™ boosts dairy farmers' margins while reducing environmental impact

An innovative product of the DSM/Novozymes feed enzymes alliance, RONOZYME® RumiStar™ increases the utilization of starch in ruminant diets, leading to improved milk production in dairy cows.

The alpha-amylase RONOZYME® RumiStar™ was launched in the EU in 2016 following its successful market introduction in Brazil the year before. RONOZYME® RumiStar™ offers enzyme technology to the European ruminant sector for the first time, and is the only feed enzyme registered in the EU for use in dairy herd diets.

Feed is the greatest cost factor in dairy farming, so any increase in the efficiency of converting feed into milk will improve returns for dairy farmers. The use of feed enzymes to increase the uptake of nutrients in the feed has traditionally focused on poultry and swine – monogastric animals with a single stomach chamber. Ruminants have a four-chambered stomach, or rumen, and so a different enzymatic solution is required in their case.

RONOZYME® RumiStar™ increases the rate of corn starch degradation in the cow's stomach. As a result, a greater proportion of the nutrients in the feed is turned into energy and bacterial protein. RONOZYME® RumiStar™ also supports starch digestion in the small intestine. Less starch reaches the hindgut to be excreted, reducing the environmental impact of milk production.

Years of research went into identifying an enzyme that could consistently deliver significant improvements in feed digestibility in ruminants. Dairy cows fed on diets containing RONOZYME® RumiStar™ produce 1.5 kg more milk per day with the same feed intake. A Life Cycle Analysis showed that the impact of milk production on climate change is reduced by about 5% when RONOZYME® RumiStar™ is added to a corn-based dairy diet due to the higher milk yield per kilogram of feed, compared to the same diet without enzymes.

This business addresses the global feed ingredients markets for poultry, swine, aquaculture, ruminants and pets. For all these segments, DSM is a full value chain player, providing active ingredients, delivery systems, and nutritional and premix solutions both globally and at a local level. We focus on the nutritional ingredients and additives segments of these markets.

The global animal nutrition and health market is driven by the need to improve production efficiency in response to the growing global demand for animal protein while at the same time reducing the environmental impact of farming. The efficiency drive continued unabated for all species and across regions during 2016. This led to a further rise in demand for our specialty animal nutritional solutions, with strong uptake in the enzyme category.

The need to reduce the use of antibiotics and replace antibiotic growth promotors continues to stimulate the search for innovative new alternatives to foster animal health and welfare as well as to increase feed conversion. With our extensive portfolio and profound application knowledge, we are well placed to capture the new business opportunities this generates with our enzymes and eubiotics solutions, benefiting from this development in all major markets during 2016. At the same time, we continue to invest in the quest for innovative and sustainable approaches that improve animal gut health.

The positive sales trend of 2015 continued, with strong volume growth in all regions, with the exception of Latin America, due to the weak economic conditions in that region. Growth was driven by new nutritional solutions, supported by the quality of our portfolio, our nutritional expertise, our formulation and application know-how, and our global premix footprint. This trend was assisted by highly focused customer management across regions and species, accompanied by intensified marketing of our specialty portfolio and a sharper focus on local solutions (e.g. the Victus™ poultry enzyme life cycle solutions in the US). In keeping with our strategy, we took steps to further grow our business in under-penetrated segments such as ruminants and aqua while continuing to expand our core activities across geographies.

With our business-to-farmer (B2F) initiative for swine and poultry, we targeted a new customer segment with a new brand in China, which is likewise on track. This is well supported by our world-leading research facility in the country. Further investments in our premix business, particularly in Asia, have enabled powerful regional growth and the ability to deliver even greater value to our customers in those countries.

New products such as RONOZYME® RumiStar™ – an amylase that increases the utilization of the starch in dairy rations, leading to improved milk production in dairy cows – was successfully launched in the EU in 2016, following its market introduction in Brazil the previous year. Offering enzyme technology to the European ruminant sector for the first time, RONOZYME® RumiStar™ is the only enzyme registered in the EU for use in dairy farming.

DSM's innovation pipeline in animal nutrition is being increasingly strengthened via our strategic alliances in enzymes with Novozymes and in lipids with Evonik and our proximity to progressive major players and key opinion leaders.

Pre-marketing work with leading aquaculture feed producers commenced for Green Ocean – a disruptive new algae-based technology for the production of the two key omega-3 polyunsaturated fatty acids (EPA and DHA) for use in fish feed. EPA and DHA are essential nutrients for the health and development of fish such as salmon, which in itself is a key source of these nutrients in the human diet. Green Ocean responds to the growing global need for sustainable aquaculture, while offering a competitive approach to delivering these essential fatty acids for fish and human diets.

Methane is the second most important human-induced greenhouse gas after carbon dioxide, and the need to urgently tackle methane emission levels has been high on the global sustainability agenda since COP21. DSM's innovative solution for reducing methane emissions in cows (Clean Cow) is on track, and pre-marketing work had begun by the end of 2016. Reducing emissions from cattle will bring significant environmental benefits worldwide.

Human Nutrition & Health

Highlights 2016

- Significant step-up in organic growth
- Continued strong growth of key brands of DSM i-Health dietary supplements
- Launch of MEG-3® Ultra to reshape the omega-3 category

Human Nutrition & Health reported 2016 sales of € 1,823 million compared to € 1,741 million in 2015.

This business provides nutritional solutions for the food and beverage, dietary supplements and early-life and clinical nutrition markets, with a parallel focus on solutions for the pharmaceutical industry for the use of vitamins, nutritional lipids (ARA/EPA/DHA) and carotenoids as Active Pharmaceutical Ingredients (APIs). Its fundamental driver is the link between nutrition and health, supported by a number of global megatrends.

Our Human Nutrition & Health business strives to make a positive impact on some of the most important health issues, such as cardiovascular, eye, cognitive and gut health, through helping to create awareness by engaging with multiple stakeholders. It also aims to help eliminate micronutrient deficiencies at the Base of the Pyramid. For more information on our initiatives in this area, see 'Nourishing the Base of the Pyramid' on page 11 and 'Stakeholder engagement' on page 24.

This business posted good growth in EMEA and Asia during 2016. North America, although soft overall, showed improvements. Business results in Latin America reflected the weak economic conditions in the region.

Our i-Health dietary supplements consumer business again performed strongly, recording double-digit growth during the year on the back of powerful marketing & sales campaigns and continued international expansion, with a particularly strong performance in China. Culturelle® continued to grow at a double-digit rate, expanding its leadership position in the probiotic category. Estroven® and Azo™ also grew strongly in 2016, strengthening their respective number one shares in the women's health and urinary health categories. DSM also successfully launched Azo Urinary Tract Defense™ in US food, drug, and mass channels in 2016.

We continue to observe a positive trend in leveraging the higher dosage of ingredients – such as vitamins, omega-3 and carotenoids – as APIs in pharmaceutical applications. DSM is the only company that holds CEPs (Certificate of suitability of Monographs of the European Pharmacopoeia) and the US Drug Master Files (DMF) for all 13 essential vitamins, putting us in a unique position to help pharmaceutical customers get their products to market faster.

To address the decline in the US market for non-concentrated fish oils and the growth in the concentrates dietary supplement category in that country, and also to accelerate the development of our omega-3 business in other regions, we introduced the new MEG-3® Ultra in North America and EMEA in the fourth quarter of 2016. Featuring DSM's unique 3C technology, this radically new product helps eliminate key barriers to the consumption of omega-3 supplements, such as capsule size and aftertaste. MEG-3® Ultra allows brand owners to create health-focused products with specific DHA and EPA ratios that meet consumer needs across the lifespan. The capacity for customizing DHA and EPA ratios will also help mitigate supply-related risks.

The launch of MEG-3® Ultra was supported by a communication campaign on the theme 'Know Your Ω™'. Reinforcing omega-3 intake recommendations to help protect patients from cardiovascular disease and other health risks, 'Know Your Ω™' recognizes the key role healthcare practitioners can play in addressing the currently inadequate levels of omega-3 intake among the US population.

Targeting the global number one position in dietary supplement probiotics

The global dietary supplements probiotics market is predicted by Technavio to grow at around 7% per year from 2015 to 2019, with new product innovation helping to fuel this growth. The market is highly segmented and extremely competitive, so product differentiation supported by authenticated health claims is vital for success.

DSM's digestive health probiotic Culturelle® has a track record of driving organic growth and outperforming the probiotics marketplace and is expected to continue to outperform the market in 2017. Currently the number one-selling consumer dietary supplement probiotic brand in the US, Culturelle® is poised to become the second-ranked probiotic brand globally, according to Euromonitor.

This top-line growth has been achieved by creating consumer demand for Culturelle®. There were three steps to this process. First, DSM sought to understand and validate consumers' health and wellness needs via attitude and usage studies such as the 2011 Women's Health and more recent Path-to-Purchase Studies, following this up with concept tests. Second, we delivered on those needs across three growth platforms (Digestive Health, Everyday Wellness, and Kids) through a pipeline of consumer-inspired, scientifically-backed innovations based around Lactobacillus GG – the leading clinically-studied probiotic strain. Finally, we positioned Culturelle® as the proven probiotic brand in the broader health and wellness space. This was achieved by driving brand awareness among consumers and deploying initiatives with retailers and distributors, while engaging in medical marketing initiatives to reach healthcare professionals with the benefits of Culturelle®. Culturelle® is the number one Pediatrician and leading Pharmacist Recommended Brand in the US.

The new Culturelle® Pro-Well 3-in-1 probiotic plus omega-3 supplement also performed very well in 2016. With increased consumer, retailer and international demand, Culturelle® is on track to realize its vision of becoming the number one consumer dietary supplements probiotics brand worldwide.

Our sales to the food & beverage sector improved in 2016, driven by good sales volumes in Asia and Europe. Meanwhile our infant nutrition business continued to perform well, with solid volume growth.

The new vitamin B6 facility in Xinghuo (China), which was mechanically completed at the end of 2015, opened in 2016, expanding DSM's global manufacturing footprint and supporting growth in the region.

Personal Care & Aroma Ingredients

Sales in Personal Care & Aroma Ingredients came to €337 million in 2016, up from €316 million in 2015.

Personal Care provides ingredients and innovative solutions for some of the world's best-selling beauty products. Our extensive portfolio of key ingredients includes peptides, natural bio-actives, UV filters, hair polymers and vitamins; this is complemented by a range of additional services. The business is driven by global megatrends, local consumer beauty regime insights, and growth opportunities presented by emerging economies.

The global megatrend of health and wellness, operating in tandem with the overall aging of the world's population, is fostering increased consumer awareness of the need for daily UV protection, and is stimulating high demand for innovative skin care products. Emerging economies, in particular, are seeing rising demand for products tailored to local consumer preferences, with the Chinese market developing fastest in terms of growth and sales.

The year 2016 was strong for DSM Personal Care & Aroma Ingredients as a whole, driven by organic growth across all segments, with powerful growth in the business unit's carefully managed global key accounts. We accelerated our innovation drive and continued to deepen our understanding of customer and consumer needs during the year.

The business increased its innovation footprint with the launch of several new skin care and sensory modification products, including the innovative eye care solution SYN-EYE™; the award-winning active against skin dryness SYN-UP™; the anti-aging innovation SYN-STAR™; and a new sensory modifier, VALVANCE® Touch 250. The launch of the new TILAMAR® hair care polymers, meanwhile, expanded our position in this growing global market.

The year also saw the opening of the DSM Personal Care Asia Pacific Technical & Application Center in Shanghai (China). This center will develop product applications, provide technology services, and create tailor-made solutions for cosmetic industry customers throughout the growing markets of China and Asia Pacific.

Regulatory and formulation expertise puts PARSOL® TX ahead

Titanium dioxide finds extensive applications in the personal care sector, being used as a pigment, sunscreen and thickener. Its high refractive index, strong UV light-absorbing properties and resistance to discoloration under UV light make this the fastest-growing technology segment in the UV filters market, with strong worldwide demand from applications for facial care, color cosmetics and men's grooming. DSM offers a unique grade of titanium dioxide: PARSOL® TX, an inorganic UV filter with excellent formulation compatibility, which makes it suitable for a wide range of product applications.

DSM applies the highest safety standards to its products. We also work closely with our customers to ensure that the product safety claims that they base on our products are fully substantiated. In July 2016, the European Commission (EC) amended the Regulation on Cosmetic Products (1223/2009), which sets safety and marketing rules for cosmetics in the European Union, adding nano titanium dioxide to the list of authorized UV filters. In this revision, the EC issued a detailed list of product characteristics essential for compliance with its safety standards. Using our scientific and regulatory expertise, we worked closely with some of our largest global key accounts in sun and skin care, providing our customers with the necessary expertise in product quality, regulatory affairs and product formulation to help them fully comply with the new regulation.

PARSOL® TX became the first titanium dioxide UV filter to comply with the amended EC Regulation on Cosmetic Products. It is also fully compliant with all other relevant global regulations. Speedy compliance with the amended EC regulation offered us a significant competitive advantage, establishing PARSOL® TX as the global number one product grade in titanium dioxide technology. As a direct result of our regulatory expertise and dedicated customer support, sales of PARSOL® TX increased by 55% in 2016.

The DSM Vouvry site in Switzerland, which produces the organic ALPAFLOR® portfolio, was proud to be awarded the 'Fair Trade' seal of approval.

Aroma Ingredients
DSM supplies aroma ingredients to the flavor and fragrance industries which are used in many of the world's best-known consumer brands. During the year, DSM significantly increased its specialty ingredients portfolio, while also reducing costs and improving efficiencies. The business showed a good performance in 2016.

DSM Food Specialties

Highlights 2016

- Good organic growth, especially in hydrocolloids and enzymes
- Completed new state-of-the-art biotechnology center in Delft (Netherlands)
- Launched new cheese cultures and ModuMax® taste modulator

In 2016, sales for DSM Food Specialties amounted to €536 million, compared to €524 million in 2015.

DSM Food Specialties is a leading global supplier of food enzymes, cultures, bio-preservation, hydrocolloids, taste and health ingredients. With over a century of experience in fermentation for the food industry, the business group helps make existing diets healthier and more sustainable, giving increasing numbers of people around the world access to affordable, quality food. Customer proximity and the ability to deliver products highly tailored to local requirements are the basis for our continually expanding portfolio of innovative fermentation-based product solutions. This was underlined by the 2016 launch of the business group's new vision: *Enabling Better Food for Everyone*.

Market trends driving demand for our products center on five main topics: sugar reduction, salt reduction, bio-preservation, gut health and more efficient processing. DSM Food Specialties is fully committed to delivering innovative solutions that enable food producers to capture the opportunities presented by these trends. The business group continued to deliver valuable consumer insights to the industry in 2016, and to build thought leadership in the area of healthy and sustainable food ingredient solutions, primarily based on fermentation.

Reducing added sugar: a growing business

Sugar is increasingly seen as a key culprit for the worldwide growth of obesity, fueling the spread of type 2 diabetes and cardiovascular disease and generating ever-higher healthcare costs.

Many food & beverage producers have responded with commitments to reduce the sugar levels in their recipes. In several countries, cross-sector agreements are in place for a voluntary, stepwise reduction, while certain others are introducing a so-called 'sugar tax'.

The sweetener market is valued at more than €70 billion per annum, with sugar representing 85% and high-fructose corn syrup another 10%. Non-artificial sweeteners like stevia make up less than 1% of this amount, but the market for sugar reduction solutions is growing at double-digit rates.

Replacing sugar in food & beverage products is complex, since sugar also influences mouthfeel, texture and shelf life. DSM research reveals that consumers expect sugar-reduced products to taste less appealing than regular versions.

Helping customers create better-tasting products, DSM Food Specialties has created a sugar-reduction development platform based on its market-leading lactase enzyme Maxilact®, the combination of cultures and enzymes, and the development of fermentative stevia glycosides.

In the reduced-sugar dairy products category, new introductions are showing rapid growth. One of our solutions is the combination of the Maxilact® LGi enzyme and Delvo®Yog FVV-122 cultures, with which producers can reduce added sugar by up to 20% in yogurt products. Maxilact® LGi converts the lactose in milk into glucose and galactose. This provides a higher relative sweetness than sugar, permitting the desired reduction in sugar content. Using the mild-tasting Delvo®Yog FVV-122 culture in addition allows producers to achieve optimal texture and mouthfeel plus excellent stability over the shelf-life of the product.

The innovativeness of our response to global concerns about sugar consumption has helped create new value for our customers in the food industry and given added impetus to our business growth.

The performance of our enzymes business in 2016 was driven by a rise in demand for lactose-free and reduced-sugar dairy products which can be created with our Maxilact® enzyme. Some capacity constraints prevented the enzymes business from fully benefitting from this strong demand in 2016; these are being addressed. Growth in enzymes was further supported by our Brewers Clarex® enzyme – appealing for its ability to create a more sustainable, lean production process and to introduce gluten-free beer products to the market. Sales of BakeZyme®, which increases the elasticity of dough, were also up in 2016.

Consumer demand for healthy, high-quality dairy products is on the rise. In particular, thick, high-protein yogurts are increasing in popularity, supporting sales for DSM's advanced cultures. We introduced new specialty products for the dairy industry in line with the better-for-you, clear label and sustainable trends, in particular for creating better-tasting white cheese, low-fat and more sustainable continental cheese, and smoother, milder-tasting quark.

Sales in the area of bio-preservation products performed robustly in 2016, especially in Europe and North America. Delvo®Cid in particular appeals to customers for its ability to fight mold and yeast in a variety of foods. Besides recent FDA approvals for the use of Delvo®Cid in non-alcoholic beverages and yogurt in the US, approval was also received for its use in yogurt in Mexico. Sales were further supported by Delvotest® T, a broad-spectrum antibiotic test which identifies the presence of a variety of antibiotics in raw milk at EU Maximum Residue Limits.

In savory ingredients, we are adding to our portfolio ingredients that enhance flavor and mouthfeel so as to enable reductions in sugar, salt and fat while maintaining good taste. ModuMax®, launched in November 2016, is a natural taste modulator made from yeast which increases mouthfeel and masks negative off-notes in reduced-fat and reduced-salt soups, as well as in reduced-sugar beverages.

In addition, DSM Food Specialties made good progress in 2016 with the development of a cost-effective technology for producing the sweetener stevia by fermentation, which will permit the sustainable, scalable production of several relevant sweetener molecules, such as rebaudioside A and M.

Further developments in 2016 included a rebalancing of our manufacturing footprint involving the disposal of the surface and ripening business for soft cheese and fermented meat products, and the implementation of upgrades to our manufacturing capabilities in China, facilitating expanded enzyme production.

Another growth platform in specialty food ingredients is hydrocolloids – thickeners and stabilizers that dissolve, disperse or swell in water to provide a broad range of critical functionalities and physical attributes, including gelling, texture, mouthfeel, viscosity, suspension and animation. These versatile polysaccharides are derived from nature via extraction or fermentation.

Demand for hydrocolloids is driven by three underlying consumer trends: the quest for affordable nutrition in the form of dairy and protein products; the trend toward clear labeling; and recognition of the benefits of probiotics and prebiotics. Our hydrocolloids are primarily delivered in the form of pectin and gellan gum. Derived from apple pomace and citrus peels, pectin is used as a gelling and stabilizing agent in a variety of foods and beverages. Gellan gum is produced by a sustainable fermentation process, using glucose or soy as a feedstock. It is likewise used as a gelling and stabilizing agent in a variety of foods and beverages. Our hydrocolloids are enjoying strong sales growth.

In 2016, work was completed on a new state-of-the-art biotechnology center at DSM's site in Delft (Netherlands). The new center, which will be officially opened in the first half of 2017, provides lab space and collaborative workspaces to around 400 scientists from around the world who conduct breakthrough science in fermentation technology, integrated bio-processing, genetics, analytics and applied biochemistry for application in food & nutrition, biofuels and bio-based materials.

Materials highlights

“ In 2016, we continued the 'silent' transformation of the Materials portfolio toward higher-value specialty products. This transformation capitalizes on the growing opportunities presented by the global drive for more sustainable alternatives. ”

Dimitri de Vreeze, DSM Managing Board

The leaders of DSM's Materials businesses, from left to right: Patrick Niels, Dimitri de Vreeze, Golnar Motaharipour, Roeland Polet

The search to replace existing materials with alternatives offering better performance in combination with reduced environmental footprint continues to drive our Materials businesses. This global trend provides attractive prospects for above-market growth. We took full advantage of these during 2016.

OEMs and system integrators are looking for innovative, lightweight, high-performance solutions that deliver competitive edge while meeting ever stricter regulations. The average automobile, for example, is expected to become 200kg lighter over the next 10 years. In electronics, businesses and consumers alike are seeking more advanced device mobility and connectivity. This is fueling demand for smaller, thinner, smarter products in a huge range of different applications, from datacenters to wearable digital devices. Our extensive and growing range of high-performance engineering plastics allowed us to deliver new kinds of value to automotive and electronics customers in 2016.

Meanwhile, industry changes driven by market and (environmental) legislation led to a further shift to sustainable paints and (waterborne) coatings as well as functional materials, which provided significant headroom for our Resins & Functional Materials businesses. New products such as powder technologies for wood and new customer-driven specialty solutions further fueled strong growth during the year. Dyneema® made further strides in the performance apparel segment, paving the way for innovative new fabrics and clothing applications, as well as opening a completely new segment with Dyneema® carbon composite reinforcement for applications such as airplane fuselages and racing car body shells.

Our ability to innovate is crucial to our success in Materials: our fundamental scientific expertise underpins the market-focused R&D that goes into the development of new applications. To increase our innovation capabilities, we established the Materials Science Center this year as a cross-company platform for state-of-the-art know-how in materials science.

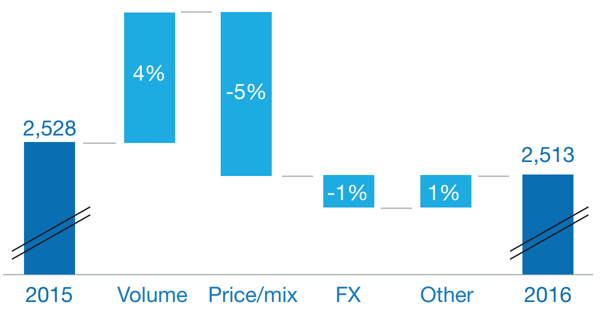
Each business in our Materials cluster has a tailored growth strategy. We organized our resources, innovation activities and capital allocation during 2016 in strict accordance with our growth aspirations. Our businesses fall in the three strategic segments *Accelerated growth*, *Growth*, and *Maximize returns*. Our 2016 performance gives us both encouragement and confirmation that this approach to the ‘winning segments’ we have identified is paying off.

Materials

x € million	2016	2015
Net sales:		
DSM Engineering Plastics	1,312	1,378
DSM Dyneema	297	284
DSM Resins & Functional Materials	904	866
Total	**2,513**	**2,528**
Organic sales growth (in %)	(1)	(4)
Adjusted EBITDA	435	384
Adjusted operating profit	311	250
Capital expenditure	106	98
Capital employed at 31 December	1,807	1,723
ROCE (in %)	17.6	14.4
Adjusted EBITDA margin (in %)	17.3	15.2
R&D expenditure	124	143
Workforce at 31 December (headcount)	4,460	4,472

Materials - net sales bridge 2016

x € million



Business

DSM's Materials cluster comprises DSM Engineering Plastics, DSM Dyneema and DSM Resins & Functional Materials. DSM Engineering Plastics is a global player in specialty plastics. These materials are used in components for the electrical and electronics, automotive, flexible food packaging and consumer goods industries. DSM Dyneema is the inventor, manufacturer and marketer of Dyneema®, the world's strongest fiber™. DSM Resins & Functional Materials is a global player in innovative, sustainable resins solutions for paints and industrial and optical fiber coatings. For more information on DSM's Materials cluster and its portfolio of businesses and products as well as their value chains, please refer to DSM's Factbook on the company website.

The Materials cluster delivered strong financial performance in 2016, which reflected the success of the differentiated approach of focusing on higher-growth specialty businesses in the Materials portfolio. While volumes were up 4% in the year, prices were considerably lower, fully reflecting low input costs, meaning that total sales for the Materials cluster were down by 1% from €2,528 million in 2015 to €2,513 million in 2016.

Total Adjusted EBITDA for the full year 2016 increased by 13% to €435 million from €384 million in 2015. This was driven by strong volume growth in higher-margin specialties, the benefits of the efficiency and cost savings programs and the support from low input costs.

Trends

The key trend in the materials industry is substitution. Customers are looking to replace existing parts and materials with newer, more sustainable alternatives. Across a wide range of sectors and applications, manufacturers are seeking products and solutions that will help reduce energy consumption and harmful emissions, both within their own operations and across their value chains, and that have properties enabling further innovative applications. This trend is reinforced by legislation on the one hand and end-user expectations on the other, and so circular economy principles in product and process design are also beginning to gain traction. As legislators, customers and end-users alike demand new approaches to the use or re-use of materials, DSM creates innovative products that either meet or outperform existing product functionalities while being lighter, more versatile and more sustainable than the materials they replace. Our portfolio includes high-performance plastics; waterborne resins; functional materials; ground-breaking materials and fabrics based on Dyneema®, the world's strongest fiber™; and bio-based and renewable plastics and resins.

Not only product functionality but also product and process safety are high on the agenda of regulators and consumers alike. DSM Engineering Plastics and DSM Resins & Functional Materials offer products and solutions that eliminate or reduce the use of hazardous substances, including halogens and volatile organic compounds (VOC). Dyneema® is being used to create alternatives to heavy, dangerous and high-maintenance steel cables in offshore, marine and lifting and loading applications.

We see important growth opportunities for our Materials business as we help more and more customers to switch to sustainable manufacturing practices based on the substitution of existing materials by our portfolio of better-performing specialty alternatives. For example, in China the introduction of legislation to limit emissions is driving the uptake of lightweight engineering plastics in automotive. As markets and segments continue to develop across the world, the substitution effect will become increasingly important.

Sustainability & Innovation

Sustainable innovation is the key enabler for the substitution of existing materials by better-performing specialty alternatives. Through its innovative products and services, DSM strives to make a positive difference to people's lives while reducing the environmental footprint of their activities.

The search for sustainable solutions that meet the rapidly changing needs of society and the planet therefore drives the growth efforts of our Materials cluster. We continue to enhance the value of our materials portfolio by introducing high-performance products that offer improved functionality in combination with reduced environmental impact. These solutions contribute to Sustainable Development Goal 12 (Responsible Consumption and Production). Examples are provided in this chapter and elsewhere in this Report.

Strategy

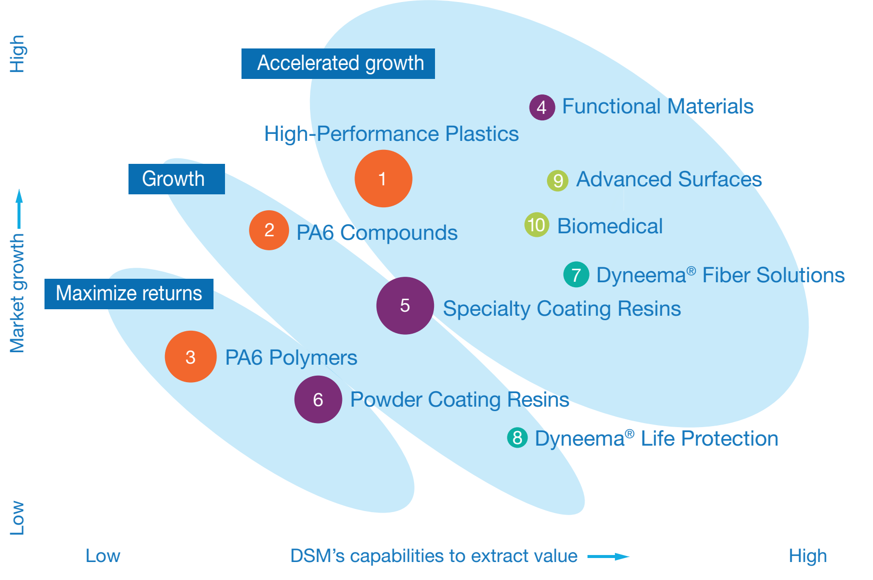
Over recent years, DSM has built an attractive portfolio with high-quality earnings within its Materials cluster. Our Materials businesses are well positioned to capitalize on the dynamics within their respective end-use markets. We apply a differentiated strategy, with tailored business approaches to serve these individual markets. We focus resources primarily on well-defined, higher-growth specialty segments, while leveraging existing assets to *Maximize returns* in PA6 Polymers and Powder Coating Resins. There is a *Growth* strategy for specialty resins, engineering plastic compounds, and solutions for life protection. We have defined an *Accelerated growth* strategy for our high-performance plastics, functional materials and high-performance fiber solutions. The Emerging Business Areas of DSM Biomedical and DSM Advanced Solar in the Innovation Center are also related to Materials and represent promising growth platforms for the longer term. This differentiated approach is driving the transformation of our solutions portfolio and allowing us to capture higher-value business for DSM.

- One example of a new, sustainable solution contributing to accelerated growth is the application of our high-performance engineering plastics Stanyl®, ForTii® and ForTii® Eco in new, ultra-thin USB type-C connectors, the new industry standard.
- We are further driving accelerated growth by entering promising new segments, for example in Dyneema® fiber solutions, which continue to grow in ultra-strong and lightweight high-performance apparel.
- In Resins & Functional Materials, we are making good progress with our sustainable, waterborne coatings business for marine containers, a segment which is growing fast in China.

Materials strategy 2018

Aspirations 2018 underpinning Group targets

- Annual Adjusted EBITDA growth: high single-digit percentage increase
- Annual ROCE growth: high double-digit percentage increase bps
- Adjusted EBITDA margins: > 15% over the period
- Above-market sales growth (at stable prices)



- DSM Engineering Plastics
- DSM Resins & Functional Materials
- DSM Dyneema
- Emerging Business Areas*

* Reported in Innovation Center

DSM's Materials cluster aims to complement its top-line growth with margin management and cost & capital discipline to ensure that this growth is also translated into its bottom-line results. Besides benefiting from the DSM-wide savings program in support functions and services, Materials is building upon the successful profit improvement programs it has carried out.

DSM takes a balanced view of its Materials business. Our strategy strives to maximize the opportunities arising from our portfolio and the key market and societal trends in materials, while recognizing, anticipating and mitigating the risks that these global developments can also pose to our product-market combinations or business progress. For Materials, these potentially include: input price volatility, in particular for oil and its derivatives; commoditization of materials or market segments; new mobility and transport options; developments in 3D printing; disruption due to the circular and sharing economy; our ability to develop, bring to market and exploit promising innovations; and the effects of geopolitical and macro-economic developments. For more information on how DSM manages risks, see 'Risk management' on page 102.

DSM Engineering Plastics

Highlights 2016

- Strong volume growth in specialty portfolio
- Launched next-generation ForTii® high-temperature polyamides
- Inaugurated DSM NHU joint venture for manufacture of high-performance Xytron™ PPS compounds

DSM Engineering Plastics booked full-year sales of € 1,312 million in 2016 compared to € 1,378 million in 2015.

DSM Engineering Plastics is a global supplier of high-performance engineering thermoplastic solutions. It has a focused portfolio, with global leadership positions in many of its products in the areas of high-performance plastics, such as Stanyl®, Arnite® and Akulon®. DSM Engineering Plastics addresses key markets in automotive and electronics, and provides solutions to specialized industries including water management, breathable textiles and flexible food packaging.

Our world becomes more mobile and connected every day – on the road and in the home, in the office and on the street. The markets for engineering plastics increasingly require innovative solutions that make people's lives safer, more convenient and healthier, while addressing the challenge of climate change.

New standards in design, comfort and ease of use are combining with the quest to cut energy use: together with the introduction of circular design thinking, these trends are driving strong market growth for engineering plastics. With our broad, high-quality materials portfolio and in-depth technology know-how, we work in close collaboration with customers to develop new applications in response to the search for lighter, stronger and more durable materials, developing solutions to keep them ahead of the curve and enabling them to lead the market through the use of cutting-edge technology. Our aim is to continually shift the DSM Engineering Plastics portfolio toward higher-value, specialty materials, introducing more advanced grades with improved properties.

Samsung chooses Arnitel® for Galaxy Gear straps

The wearable electronics market is poised to triple in size between 2015 and 2020, with applications ranging from fitness & wellness through medical & healthcare to infotainment & industrial. The quest for improved connectivity, greater functionality and enhanced design is driving this growth, along with the need to reduce the environmental impact of manufacturing and to cut levels of e-waste.

Physical comfort and the possibilities of color play a crucial role in the design of today's wearables. DSM's Arnitel® offers smart watch manufacturers real design freedom while ensuring the extreme ease of wear demanded by consumers.

Samsung Electronics chose to use DSM's Arnitel® TPE copolyester elastomer for making its Galaxy Gear strap because of this material's excellent physical and chemical performance. Arnitel® gives the strap the required soft touch and feel, and is very comfortable to wear in direct contact with the skin, causing no allergic reactions. Arnitel® is resistant to perspiration and to the various oils and other liquids to which watch straps are exposed when in direct contact with the skin.

Arnitel® TPE is easy to process via injection molding, and can be used in 2K-hybrid overmolded structures in combination with other thermoplastics such as polycarbonate, ABS, PET and PBT, providing excellent adhesion. Being intrinsically bright, as well as offering high UV resistance, the Arnitel® polymer permits the production of compounds in a broad range of colors, including ultra-white.

The biocompatibility of Arnitel® is certified according to USP Class VI and ISO10993 standards. As a collaborative innovator working with leading wearable device manufacturers worldwide, DSM was quick to recognize the critical importance of ensuring that the Arnitel® product range was evaluated for prolonged skin contact. Arnitel® has full regulatory compliance, which validates our customers' confidence in their selection of these materials for skin contact applications, and enables them to leverage the many other high-value performance properties that these materials offer.

Our business serving the automotive sector performed solidly in 2016. The trend toward lighter vehicles, encouraged by environmental legislation worldwide, is stimulating innovation among OEMs and creating a strong pull for DSM's specialty engineering plastics. DSM continues to innovate in this space; 2016 saw the launch of next-generation high-temperature polyamides ForTii® PA46, including the bio-based grade ForTii® Eco and the metal substitute ForTii® Ace.

The need to reduce fuel consumption and cut vehicle emissions, combined with the search for safer cars, as well as the move to electrification, creates many new opportunities for our products. So does the increase in the actual numbers of cars being manufactured globally. DSM's specialty thermoplastics portfolio was further expanded in 2016 by the launch of the high-performance thermoplastic copolyester Arnitel® HT, which allows system suppliers to produce heat-resistant ducts in a single material, with just one process step. Arnitel® is increasingly being selected as a lighter, smarter, more sustainable alternative to conventional rubbers – reducing environmental impact and, ultimately, system costs.

The increased connectivity in the conception and design of automotive vehicles finds many counterparts in the electrical and electronics field. The convergence to universal connectivity through USB-C, accompanied by the massive increase in cloud computing requiring connectivity for server farms, is fueling demand for Stanyl® and ForTii®, both of which offer the high temperature resistance and flowability essential for these applications. In consumer electronics, the quest for 'thinnovation' is likewise driving demand for these products, which find applications in the production of mobile phone antennas, splitters and frames. Also in the consumer sector, the growing popularity of wearable mobile devices is creating significant demand for products such as Arnitel®, which enables the creation of very light designs with a silky look and feel. Among other things, 2016 saw the inauguration of DSM NHU, a joint venture with specialty chemicals producer Zhejiang NHU Special Materials Co., Ltd., (NHU) to produce Xytron™ polyphenylene sulfide (PPS) high-performance compounds.

In 2016, we extended our portfolio of high-performance materials for water-cooling applications in automobile engines with the introduction of a hydrolysis-resistant grade of our high-performance bio-based polyamide, EcoPaXX®. EcoPaXX® Q-HG6/7 is very well suited to applications such as expansion tanks that need to resist coolants at high temperatures. The use of EcoPaXX® Q-HG6/7 enables component weight to be cut by as much as 30% compared with Polyamide 66. A recently-developed thin-walled 'T' connector for a coolant hose in this grade was approved for use by a major German car manufacturer in 2016, going into commercial production a few months later.

Our commitment to the continued development of our innovative specialty engineering plastics portfolio was underlined by two investments in 2016. In the US, the expansion of DSM Engineering Plastics' research & technology center in Troy (Michigan, USA) strengthened our product development and application capabilities in North America. In India, a new research & technology center in Ranjangaon, Pune was opened to support new product and application development and deliver rapid, specific test data for its products. The new facilities bring us yet closer to our customers in the respective regions and enable us to cut time-to-market still further for innovative new thermoplastic solutions and applications.

DSM Dyneema

Highlights 2016

- Strong growth in life protection (next-generation armor technology)
- New apparel solutions positively received by key brands in the sports and lifestyle segment
- Launch of Dyneema® Carbon hybrid composite

DSM Dyneema reported total sales of €297 million in 2016 compared to €284 million in 2015.

DSM's Dyneema® business is driven by our customers' and end-users' needs for lightweight, sustainable solutions that offer extreme durability coupled with improved safety and ergonomics. Dyneema® products typically replace traditional materials such as steel and aramid.

Dyneema® is the world's strongest fiber™. It is 15 times stronger than steel on a weight-for-weight basis, 40% stronger than aramid, and floats on water. This combination of extreme strength and lightness makes it suitable for a wide and expanding range of applications.

DSM Dyneema has a well-established fiber solutions business serving the high-protective textiles and commercial marine & sports segments. We are also entering and forward-integrating into new segments and applications such as performance apparel, synthetic chains and radomes.

We are well positioned to capitalize on these opportunities. We have global product leadership based on unique, IP-protected technology platforms applied in an increasing range of end-use applications, often developed in close collaboration with industry partners.

Applications with Dyneema® push the boundaries of lightweight strength, offer comfort and safety, and are inherently more sustainable than the materials they replace. Products with Dyneema® weigh less, use less material, need less energy to process and deploy in their final application, and have longer lifetimes than products made with alternative materials.

DSM Dyneema experienced some headwind in certain markets in 2016 – for example, offshore mooring and protective gloves, on account of the low oil price and lagging industrial markets in certain regions. This was offset by two factors: on the one hand, strong growth in the life protection market, and on the other, our growth into the performance apparel market with Dyneema® fabrics.

In the life protection market, Dyneema® Force Multiplier Technology and Dyneema® Anti Stab Technology enjoyed strong uptake in 2016. Meeting high ballistic and anti-stab performance standards, Dyneema® offers significantly lighter, more comfortable, and more ergonomic solutions than are possible with aramids, ceramics, or other materials. Dyneema® is increasingly finding favor with law enforcement agencies such as the New York City Police Department due to its exceptional performance and wearability.

DSM Dyneema launched a new technology platform in 2016 with Dyneema® Carbon hybrid composite. Carbon fiber is light and strong, but tends to shatter when hit by small, sharp objects. Mixing carbon fiber with Dyneema® fiber solves this problem, creating a solution that offers significantly better impact resistance and vibration damping.

In 2016, the market responded positively to Black Dyneema® Diamond Technology, a fiber innovation aimed at heavy-duty gloves, among other things, which offers the highest level of cut protection and uncompromised comfort in industrial applications such as for metalworkers. Black Dyneema® Diamond Technology, which was launched toward the end of 2016, uses DSM Dyneema's unique patented process to permanently embed color directly into the fiber.

We also made positive inroads into the sports & lifestyle markets in 2016. Dyneema® is the first genuinely new material to have been introduced to these markets for a long time, and is pushing the boundaries of strong, ultra-lightweight, comfortable, durable and protective solutions. During 2016, we significantly expanded our range of brand licensing partnerships in both existing and new markets. Collaborations with leading brands in these markets are in progress, and we see considerable untapped potential in this area. At the ISPO TEXTRENDS 2016 forum, seven different Dyneema® fabrics received ISPO Awards for 'Best Products Spring/Summer 2016'.

Dyneema® strengthens Cone Denim's cutting-edge offering

Allen Little is Director of Product Development at Cone Denim – a company renowned for being at the cutting edge of denim. Allen discusses what Dyneema® adds to Cone's offering.

"Denim isn't just for workwear or fashion anymore," Allen observes. "Consumers want their jeans to do more. With Dyneema®, we're able to offer the authentic aesthetic that Cone is known for, combined with a modern design incorporating performance features such as strength and durability. Consumers can now wear performance jeans to go rock-climbing, skateboarding and motorcycling, before directly proceeding to a nice dinner and a night on the town."

Working closely with Cone's spinning and development partner Patrick Yarns, Allen and his colleagues learned how to perfect the spinning process specific to the Dyneema® fiber. They then used their own manufacturing plants to refine their processes for weaving the fabrics. "It was a challenge," recalls Allen. "We wanted to make the best fabric out there – and I think we succeeded."

Cone uses higher percentages of Dyneema® than common with other manufacturers, so the company's denim has an exceptionally high level of strength, durability and abrasion resistance. These attributes are combined with Cone's authentic designs, creating the best of both worlds. "The performance features are hidden to the eye," explains Allen, "but they're there when you need them. We've also incorporated all the different deniers and fiber types that Dyneema® has offered us – depending on the end-use and targeted customer."

"Our partnership with DSM Dyneema is special," Allen concludes. "We always search for the right partners in technology, and DSM is one of those. Cone is proud to be one of DSM Dyneema's Premium Manufacturing Partners, and we've worked very closely with them to fine-tune the products we're currently offering. When you look at the performance numbers on this fabric, they speak for themselves."

Dyneema® has the lowest carbon footprint per unit of strength compared with alternative materials. Three factors combine to make it 'the greenest strength™': continuous improvements in manufacturing, ongoing R&D to further improve the fiber's unique properties, and collaborations with clients and industry partners to invest in initiatives that foster a circular economy. Seismic survey vessels using ropes made with Dyneema®, for example, show 15% fuel savings and a 50% reduction in the amount of material used. Denim wear made with Dyneema® offers a 30% carbon-footprint reduction across its life cycle. And heavy-duty chains made with Dyneema® use 85% less material compared to the steel they replace, making them lighter, easier to handle and less noisy.

DSM Dyneema is also using its materials expertise to sponsor The Ocean Cleanup foundation, which aims to tackle the issue of waste plastics in the world's seas. DSM is supplying Dyneema® material to maritime ropes supplier Lankhorst Ropes, and together providing the key technology for the mooring system for the foundation's floating barrier.

Lankhorst made Lanko®Force ropes out of Dyneema® and these helped to secure the various elements of the barrier system. Lankhorst used Dyneema® SK78 grade fiber for the ropes in the prototype system; Dyneema® Max Technology will be used in the final system.

DSM Resins & Functional Materials

Highlights 2016

- Strong volume growth driven by sustainable specialties
- High growth in unique fiber-optic coatings
- DSM-Niaga joint venture technology ready to produce 100% recyclable carpet on commercial scale

DSM Resins & Functional Materials reported sales of €904 million in 2016 compared to €866 million in 2015.

The shift away from solvent-based coatings that contain hazardous materials to more sustainable coating technologies continues to shape the global coatings market. End-user preferences and legislation to reduce substances such as VOCs continue to drive this substitution process, offering attractive new opportunities to the providers of innovative specialty coating solutions.

DSM is a global leader in the development and production of these innovative solutions by offering waterborne, UV and powder coating resins with clear sustainability advantages over solvent-borne coatings.

Driving the switch to waterborne coatings in China

Since the beginning of 2014, the Chinese government has been paying increasing attention to environmental protection. This includes introducing more stringent regulations on VOC emissions from solvent-based coatings.

Ninety-five percent of the world's sea freight containers are made in China, and almost all are painted with solvent-borne coatings. There are some 20 million containers currently travelling the world. In 2015, 2.5 million twenty foot equivalent containers were built, generating some 130,000 tons of VOC emissions and constituting one of the major VOC emission sources in China. Today, only a small number of these – some 20,000 in 2015 – are coated with waterborne coatings. A new container requires 60-70kg of paint. If all new containers were painted with waterborne coatings, this would require 165,000 tons of waterborne coatings a year – a very significant growth opportunity.

To mobilize industry support for the switch to waterborne coatings in China, DSM founded the Waterborne China Platform in 2010. This represents leading coatings, resins and additive manufacturers who are in a position to influence key bodies – such as the Guangdong Coating Association, the Container Owner Association and the China Container Industry Association, as well as the Chinese central and regional Environment Protection Bureau – in the drafting of VOC and coating standards for the container industry.

As a result, the Chinese container industry decided in 2016 to sign a convention to introduce waterborne coatings in two steps. Guangdong Province made the switch in July 2016 and the rest of the country will follow by April 2017. Working with paint and coatings customers such as Valspar (now Sherwin Williams), DSM Resins & Functional Materials is already seeing considerable growth in its business as a result.

Other industries and governing bodies are following suit. The Chinese furniture industry is switching to waterborne coatings ahead of the introduction of the relevant legislation, and Shenzhen Municipality has also forbidden the use of solvent-borne coatings for external wall applications.

In functional materials, DSM is the global leader in fiber-optic coatings. In additive manufacturing – 3D printing – DSM offers highly efficient and effective prototyping technologies and supports the industry in accelerating the pace at which new products are designed and brought to market.

DSM Resins & Functional Materials delivered strong volume growth in 2016. This was based on increased market share supported by growth in more sustainable specialty products and new solutions in collaboration with customers. Meanwhile we introduced innovative new products such as powder coatings for wood (Uralac® Ultra); the bio-based Decovery® product line; and new SOMOS® additive manufacturing lines such as Element (for complex casting structures) and PerFORM (for high graphic resolution).

During 2016, we strengthened our position in core markets such as industrial coatings, fiber-optic materials, architectural coatings and printing inks. Strong key account management in North America and high acceptance of powder coatings and waterborne coatings in Europe are driving current growth, while growing environmental awareness in China is fueling demand for more sustainable resin solutions instead of solvent-borne coatings.

A highlight of 2016 was the launch of the breakthrough water-borne interior furniture coating line IRIDEA Bio by ICA Group, an Italian specialist producer of wood coatings. IRIDEA Bio is fully co-branded with DSM's bio-based Decovery® line. Meanwhile, our haptic resins portfolio is attracting increasing attention. These soft-feel resins give a product a matt appearance and a velvet-like feeling in addition to heightened color intensity, and are ideal for the luxury packaging industry. We also further extended the Uralac® EasyCure product range of sustainable powder coating resins, which offer faster curing at lower temperatures for metal substrates.

DSM's UV-curable materials for optical fiber are recognized as the global standard in fiber protection. They help ensure greater signal reliability and field performance within fiber-optic networks as global bandwidth demand continues to surge. We offer telecommunications network owners a broad portfolio of DeSolite® Supercoatings. This portfolio was expanded in 2016 by the addition of High Efficiency DeSolite® Coatings, which provide enhanced processing robustness with excellent on-fiber performance and durability.

In 2016, we extended our partnership with Japan Fine Coatings Ltd., acquiring a controlling interest in the company, to strengthen our market position in Asia. DSM Resins & Functional Materials has gained a robust position in the fast-growing Chinese market and is capitalizing further on the 'fiber-to-the-home' trend in Europe and North America.

Toward the end of the year, DSM-Niaga, a joint venture between DSM and start-up company Niaga, announced that its Niaga® technology has been made ready for commercial-scale production of recyclable carpets. All carpets made with this technology can be fully recycled and made into new carpets of the same volume and quality, again and again. In scaling up the technology, DSM partnered with LACOM GmbH to develop a commercial-scale laminating machine based on the Niaga® technology, with DSM's engineered adhesive. The machine uses up to 95% less energy than mainstream lamination processes and reduces water use to zero. Unlike a regular carpet, a carpet made with Niaga® technology does not contain any latex, PVC or bitumen.

Innovation Center highlights

" Innovation is about creating business from knowledge. The DSM Innovation Center ensures that the company always has a robust innovation pipeline. 2016 was a positive year for us, not just in terms of scientific achievements and financial performance but also regarding the holistic way we think about innovation at DSM."

Rob van Leen, DSM Executive Committee

The Innovation Center reached Adjusted EBITDA break-even in 2016 as planned, and sales of innovative products introduced within the past five years were in line with our aspiration, at 22% of DSM's total for the year. These are some of the more 'hard' statistics that testify to the value of the innovation approach within DSM. As we inevitably withdraw established products from our portfolio over the course of time, these need to be replaced by innovative new products – solutions that address key global trends and create a better future for people, today and tomorrow. That's what we mean by turning DSM's 'Bright Science' into 'Brighter Living'.

We have made measurable advances since embarking on our company-wide innovation drive in 2006. The DSM Innovation Center has helped DSM become a top innovator, and we have successfully commercialized this achievement. Our margins on innovation sales are typically higher than on our regular products; and our speed of innovation has doubled since 2010, significantly reducing time-to-product and time-to-market. Our focus on the market potential of new concepts has helped improve the predictability of our innovation efforts, greatly increasing the chances of success for our new product pipeline.

We help create new business, and we also help accelerate the development of products already in the pipeline, cutting time-to-market so as to offer our customers the competitive advantages that come with transformational differentiation. This calls for a mentality that understands what is required to make science happen successfully. We foster this with our Excellence in Innovation program, a multiple roadmap of the innovation efforts of each of the business groups. We also support open innovation through partnerships, alliances and such initiatives as the SunRISE TechBridge Challenge.

In 2016, we took our collaborative efforts to drive societal change through science a stage further with our Bright Minds Challenge, aimed at accelerating a step-change in the role of solar in the energy mix. Last but not least, we encourage people who have the 'soft' skills to make science-driven partnerships work. For the work really starts when a deal is signed. A project will only succeed if the project team understands how to work creatively together – and that's the mindset we promote at DSM.

Innovation Center

x €million	2016	2015
Net sales	167	155
Organic sales growth (in %)	6	(11)
Adjusted EBITDA	1	(9)
Adjusted operating profit	(24)	(43)
Capital expenditure	32	34
Capital employed at 31 December	576	560
R&D expenditure	75	82
Workforce at 31 December (headcount)	619	630

R&D expenditure (including associated IP expenditure), continuing operations

x €million	2016	2015
Nutrition	205	223
Materials	124	143
Innovation Center	75	82
Corporate Activities	22	16
Total	**426**	**464**
Total as % of net sales	5.4	6.0
Staff employed in R&D activities (total DSM)	2,055	2,036

DSM Innovation Center

The DSM Innovation Center has two main functions. In the first place, it serves as a center of excellence to accelerate the innovation power and speed of our core businesses. In this role it also focuses on adjacent technologies for growth through its Corporate Research Program, which is steered by the Chief Technology Officer through the DSM Science & Technology Department, as well as through the DSM Venturing & Licensing activities. In its second function, the Innovation Center has a business development role, focusing on areas outside the current scope of DSM's business groups. It identifies and invests in new and innovative growth options, initially through the DSM Business Incubator. Moreover, the Innovation Center is responsible for developing and extracting value from the company's Emerging Business Areas (EBAs).

The Innovation Center made good progress in its results in 2016 with 6% organic growth, driven by higher volumes in both DSM Biomedical and DSM Advanced Solar. Profitability clearly improved due to a combination of organic growth, more focused innovation and reduction of costs. Adjusted EBITDA in 2016 achieved break-even, in line with the ambition of Strategy 2018.

Enabling DSM's Bright Science

As a science-based company, the ability to deliver innovative products and solutions is essential to DSM's business success and positive societal impact. As a center of excellence, our Innovation Center plays a central role in guiding, enabling and accelerating innovation and R&D across the company.

R&D is instrumental to the realization of DSM's innovation strategy. Most of our expenditure in this area is directed toward business-focused programs, underpinning our science-based, sustainable solutions.

DSM has seven essential scientific competence areas which are key to the company's continued success. These competence areas are in analytical, biological, chemical, engineering, macromolecular, materials and nutritional sciences. One of the Science & Technology Department's objectives is to ensure that DSM has the right combination of skills, capabilities and partners to maintain and deliver on these competence areas. The DSM science network is made up of more than 2,000 internal scientists, including 25 professors and academic associates, working around the globe. They co-operate extensively with external R&D institutions, both in specific, bi-lateral, academic collaboration efforts as well as in broader public-private partnerships, such as the Bio-based Industries Consortium. For more information on R&D and innovation partnerships in 2016, see 'Open innovation' on page 27.

DSM filed over 220 patents in 2016. This is somewhat below our long-term average. It reflects our changed business portfolio and further focus in innovation projects, in particular aimed at delivering business impact in specific innovation growth areas.

We initiated a program to establish a new shared Materials Sciences Center to better service the Materials businesses' current and future science needs. Joining forces across the Materials R&D organization will boost the ability of R&D to play a crucial role in the future growth and competitive position of the Materials businesses.

DSM Venturing & Licensing

DSM Venturing invests in early-to-late stage innovative companies in areas strategically relevant to DSM's current and future businesses. Our portfolio consists of 25 active investment companies, and each year DSM Venturing reviews well over 500 new candidates. In 2016, DSM Venturing identified and added promising new investments in several start-ups, and also appointed two highly experienced venture investment managers.

DSM Licensing consists of a group of Certified Licensing Professionals and offers professional licensing expertise across all DSM businesses for intellectual property-intensive deals, such as joint development agreements, technology acquisitions and sales, as well as in-, out- and cross-licensing deals.

Developing new business for DSM

Emerging Business Areas

DSM's EBAs provide strong long-term growth platforms in promising end-markets that are based on the company's core competences in health, nutrition and materials. DSM has three EBAs:

- DSM Biomedical;
- DSM Bio-based Products & Services; and
- DSM Advanced Solar.

Taken together, the EBAs delivered € 16 million in Adjusted EBITDA in 2016.

DSM Biomedical

DSM Biomedical partners with the medical industry worldwide to shape the future of biomaterials and regenerative medical devices that improve patients' lives. With global reach backed by a leading research and distribution network with facilities in the US and the Netherlands, DSM Biomedical's portfolio, technologies and expertise enable medical device companies to advance care across medical specialties. These products address key trends in medicine, from treating an aging population to supporting more active lifestyles – meeting the need for safer, less invasive procedures that are also more cost-effective.

Through our investment in research and our state-of-the-art capabilities, we are able to create, develop and produce innovative materials for our customers, as well as components, sub-assemblies and full medical devices. Our portfolio of high-quality biomedical materials includes biomedical polyurethanes and polyethylenes (PE), resorbable polymers, ceramics, collagens, extracellular matrices, silicone hydrogels, device coatings, and drug delivery platforms. These are used in applications in some of the world's most attractive high-growth markets, including orthopedics, sports medicine, cardiology, ophthalmology, diabetes management, and general and reconstructive surgery.

While the global market for medical devices keeps growing, the healthcare sector overall is still undergoing significant change. Increasing cost pressure on healthcare providers is continuing to drive consolidation and cost focus throughout the continuum of care. A shift is underway toward value-based care; with this comes a drive to demonstrate proven clinical results, offer solutions that speed patient recovery, and provide additional value and/or bundled pricing in combination with quality products. Traditional medical device companies are developing into overall solution providers to hospitals and are focusing less on internal R&D, preferring to buy in novel innovations from third parties. These dynamics present medical device suppliers with new prospects and opportunities to capture the emerging R&D gap.

DSM Biomedical aims to outpace market growth with focused developments in high-growth segments of the medical device market including cardiology, neurology, ophthalmics, diabetic care, and orthopedics. Primary growth drivers are PE fibers in the cardiology market, Svelte DISCREET® (the first commercially available amino acid-based polyesteramide bioresorbable drug-coated stent), and the continued growth of synthetic bone graft substitute products. The year 2016 saw new product launches in coatings and PE supplements, plus solid growth in established products (bone graft substitute, PE and polymers).

The Actamax joint venture together with DuPont reported very promising results from a 12-month, long-term follow-up study on the clinical use of its novel sprayable adhesion barrier device. Actamax has been making good progress to initiate clinical testing in the US market.

Other developments in the year included reinforcing our market-leading position in biomedical UHMWPE (DyneemaPurity®), establishing a partnership with Vention to provide customers with single-source access to coated medical devices, and developing an advanced breakthrough DSM proprietary drug delivery technology for the treatment of glaucoma.

DSM Bio-based Products & Services[1]

As the world increasingly seeks alternatives to fossil resources and progresses toward a more sustainable, bio-renewable economy, significant commercial opportunities are presenting themselves in advanced biofuels and in renewable chemical building blocks such as bio-based succinic acid. DSM Bio-based Products & Services pioneers advances in biomass conversion and seeks to demonstrate the commercial viability of sustainable, renewable technologies in collaboration with strategic partners in the value chain. The development and supply of high-value knowledge, ingredients and expertise in the field of bio-conversion technology are critical success factors. Our strategy is to license our technology and expertise to bio-based entrepreneurs, enabling them to convert biomass in a commercially viable and sustainable way.

Cellulosic bio-ethanol

The POET-DSM Advanced Biofuels joint venture has a commercial-scale production facility for cellulosic bio-ethanol in Emmetsburg (Iowa, USA). It processes corn-crop residues through a bioconversion process using enzymatic hydrolysis

[1] DSM's interest in the net result is reported as part of 'Share of the profit of associates and joint ventures'

followed by fermentation. Work in 2016 focused on bringing the plant to continuous production and toward full capacity, and progress was made during the year on addressing the pretreatment issues. This facility is the first and, to date, the only commercial-scale producer of so-called ‘2G’ (second generation) cellulosic ethanol in the US. See also Note 10 ‘Associates and joint ventures’ on page 161.

We are furthermore leveraging the expertise and products DSM has built up in 2G to create new business in making the production of all generations of bio-fuels more efficient and sustainable. We work continuously on advances in yeasts that further increase ethanol yield. In June 2016, DSM announced a joint development project with ICM, Inc. ICM has developed a way to integrate a process for converting corn fiber to cellulosic ethanol with existing ‘1G’ (first-generation) ethanol plants, for which DSM is supplying its advanced yeasts. Superior performance has been demonstrated through multiple continuous runs at the ICM pilot plant.

Bio-succinic acid
The Reverdia joint venture between DSM and Roquette operates its Biosuccinium® plant in Cassano (Italy), where it produces high-quality bio-succinic acid. Reverdia is recognized as the technology leader in this field, and was awarded the number one spot in the 2016 ‘40 Hottest Emerging Companies in the Advanced Bioeconomy’ list. This ranking is an important industry endorsement of DSM’s innovation and achievement in bio-based chemicals and materials. The recognition builds upon a successful year for Reverdia. In April, paints and coatings producer Mäder announced that it would use Biosuccinium® in its new range of bio-based alkyd paints. In October, Reverdia announced a collaboration with Dezhou Xinhuarun Technology (China) to jointly develop and promote Biosuccinium®-based microcellular polyurethane foams. These will be used in soles for footwear and in further applications. Besides this, a joint development program on bio-based polybutylene succinate compounds for injection molding was launched by Reverdia and Wageningen Food & Biobased Research. After meeting a technical milestone related to its low-pH yeast technology, Reverdia is now investing substantially in market and application development, and saw its number of customers double in 2016.

DSM Advanced Solar

DSM Advanced Solar aims to accelerate the uptake and effectiveness of solar energy by focusing on the development and commercialization of technologies and materials that increase the efficiency of solar modules, reducing the cost of energy delivered.

This business was renamed DSM Advanced Solar at the end of 2016 to better reflect its broadening portfolio of solar technologies and materials. It performed well in 2016, with top-line growth exceeding the average growth rate for the solar PV (photovoltaic) panel market.

New materials to power growth in solar

Solar panels (known as photovoltaic or PV modules) have become a mainstream source for power generation. In 2015, solar PV accounted for 25% of the new power capacity added globally, and continued strong market growth is expected as solar power becomes even more cost-competitive per kilowatt hour.

DSM is using its materials expertise to commercialize a portfolio of innovations that further lower the cost of solar energy by increasing the efficiency, durability and reliability of solar PV modules. Our solutions help harness more of the sun’s power, speeding the transition to clean, renewable sources of energy – and powering business growth at the same time.

DSM has built a strong position as a solution provider for high-performance solar PV materials, primarily driven by our market-leading anti-reflective (AR) coating, and we are expanding to offer additional materials and technologies. In 2016, we partnered with Suzhou Sunshine to be able to offer an innovative new type of backsheet. Polymeric backsheets surround the semi-conductor cells in PV modules and are key to enabling manufacturers to increase output (kWh) as well as extend durability and performance in the field. They protect PV modules against weather conditions and mechanical loads and provide safety through electrical insulation.

Suzhou Sunshine has succeeded in producing high-performance backsheets without using fluorine, an element that is known for being toxic to the environment and to people. Moreover, the backsheets are completely VOC-free – and can be recycled. They are co-extruded in a patented production process, greatly simplifying manufacturing and reducing costs by combining steps and avoiding the use of solvents, unlike conventional lamination.

The resulting backsheet has been evaluated on a wide range of performance parameters and tested and certified by CPVT, the leading Chinese testing Institute for solar PV modules and materials. DSM took its first orders for these products during the year.

Downstream sales efforts and intensified partnerships with leading PV glass manufacturers resulted in a significant growth in our share of the anti-reflective coatings market. De-bottlenecking of the manufacturing line in Sittard-Geleen (Netherlands) and transfer of the anti-reflective coating to a high solid grade ensured that production capacity met market demand, while reducing cost and carbon footprint, both for ourselves and for our customers. Our portfolio was expanded by the addition of an innovative backsheet sourced via an exclusive distribution agreement with Suzhou Sunshine New Materials Technology Co., Ltd. (China). Meanwhile, five solar material innovations were identified and earmarked for further development during the SunRISE TechBridge Challenge (reported on below under Innovation partnerships).

Our light-trapping textured surface technology showed considerable power output gain in outdoor tests during 2016 and generated significant customer interest. We will continue to further optimize technical performance before commercializing.

DSM Business Incubator

The DSM Business Incubator explores business opportunities in adjacent areas and future markets for DSM with a strong link to DSM's technologies and competence base. Platforms are created within the scope of securing food, health and energy requirements of society, in close collaboration with industry partners and existing and potential customers. DSM's Business Incubator has been instrumental in feeding the pipeline with opportunities that address customer needs.

In 2016, the DSM Business Incubator worked on a range of projects. In our energy storage project, we developed three product lines, which will be further refined in 2017. Our R&D partnership with Syngenta to develop microbial-based crop protection solutions has made an excellent start, with promising initial leads. Our Proteins for the Future project is generating interest among customers. We are building a pilot plant at our biotech site in Delft (Netherlands) so as to be able to provide prototype products at scale in 2017.

Innovation partnerships

DSM's innovation partnerships provide direct and indirect business opportunities as well as helping the company build its corporate brand along with its individual product brands.

Our ongoing partnership with the Nuon Solar Team achieved a further success in 2016. The team, composed of engineering students from Delft Technical University, won the Sasol Solar Challenge on 1 October by driving 4,716.7 km across the South African desert in eight days in a vehicle powered only by the sun. A major contributory factor was the adaption of DSM's groundbreaking light-trapping technology to create a new solar module fixed to the top of the winning Nuna8S car; the use of this innovative textured surface also improved the vehicle's aerodynamics.

The SunRISE TechBridge Challenge proved a highly effective way of identifying promising start-ups and boosting open innovation in 2016. The initiative is a collaboration between DSM, Fraunhofer TechBridge, and Greentown Labs. Of 56 applications, five early-stage companies were announced as winners of the 2016 SunRISE TechBridge Challenge, designed to identify innovations in solar materials and technologies to reduce the cost of energy for photovoltaic systems.

In 2016, DSM and Novozymes joined the newly created DIVA Ventures as co-founders, together with members of the World Business Council for Sustainable Development and pro bono counsel Pillsbury Winthrop Shaw Pittman LLP. DIVA Ventures exists to co-develop and co-invest in early-stage impact ventures in partnership with the world's leading corporations.

Bright Minds Challenge

'Science can change the world', DSM's campaign to highlight science's key role in tackling the challenges faced by societies around the globe, entered a new phase in 2016. We moved from profiling unsung heroes of science, and the often overlooked societal impact that their ideas can have, to helping new heroes put their solutions into practice with our inaugural Bright Minds Challenge.

The 2016 Challenge was initiated by DSM, together with Accenture, Greentown Labs, Skoll Center for Social Entrepreneurship, the University of Oxford, Solarcentury, SolarAid, Sungevity, CPVT and NREL. It is designed to fast-forward the transition toward 100% renewable energy by stimulating the development of innovative, scalable solutions for solar and energy storage. The consortium will provide the most promising emerging solutions with commercial, technical and mentoring support to facilitate scale-up as quickly as possible. Anyone who has a renewable energy solution that can significantly advance the potential for solar or energy storage can submit an entry.

The winners will be announced in June 2017.

Corporate Activities

Any consolidated activities that are outside the three reporting clusters are reported as Corporate Activities. These comprise operating and service activities, as well as a number of costs that cannot be allocated to the clusters. While this segment reports net sales from its service units to third parties, it normally has a negative operating result.

Corporate Activities includes various holding companies, regional holdings and corporate overheads. The most significant cost elements are corporate departments and the share-based compensation for the company.

Corporate Activities

x € million	**2016**	2015
Net sales	71	76
Adjusted EBITDA	(105)	(122)
Adjusted operating profit	(141)	(169)
Capital expenditure	16	24
R&D operating expenditure	22	16
Workforce at 31 December (headcount)	2,447	2,716

DSM Insurances

The company retains a limited part of its material damage and business interruption and product liability risks via DSM's captive insurance company. In 2016, the total retained damages were €2.2 million.

Corporate Research

The Corporate Research Program (CRP) is aimed at developing key Science & Technology competences. The CRP, which falls under the responsibility of the Chief Technology Officer, typically funds competence development programs with a longer time horizon than those run by the business groups, and focus on competences that have a broader relevance for DSM. The CRP also supports Science & Technology programs that are carried out with external parties and programs covering relevant new trends.

Share-based payments

Under the DSM Stock Incentive Plan, performance-based and non-performance-based stock options are granted to senior management, and non-performance-based stock options are granted to certain employees in the Netherlands. The costs of these share-based payments amount to €24 million (2015: €23 million) and are reported under Corporate Activities. For detailed information, see Note 27 of the 'Consolidated financial statements' on page 188.

Partnerships

As part of DSM's strategic transformation and move away from more commoditized and cyclical areas, we have established joint ventures for the pharma activities (DSM Sinochem Pharmaceuticals for anti-infectives in 2011 and Patheon for contract development and manufacturing services in 2014) and for the bulk chemical businesses in Polymer Intermediates and Composite Resins (ChemicaInvest in 2015).

The results of these joint ventures are reported under Share of the profit of associates and joint ventures and Other results related to associates and joint ventures in the 'Consolidated income statement' on page 135. See also 'Associates and joint ventures' on page 161.

These joint ventures have been created with the intention of ultimately exiting these businesses. We expect to extract significant value from monetizing these partnerships in the coming years.

DSM Sinochem Pharmaceuticals

x €million (100%)	**2016**	2015
Net sales	431	418
Adjusted EBITDA	62	57
Adjusted operating profit	34	28
Capital employed at 31 December	223	313

DSM Sinochem Pharmaceuticals (DSP) was formed in 2011 as a 50/50 joint venture between DSM and Sinochem Group, a Fortune 500 company. DSP is the global leader in sustainable antibiotics, next-generation statins and anti-fungals. DSP develops, produces and sells intermediates, active pharmaceutical ingredients (APIs) and drug products. It is at the forefront of technological and process developments for anti-infectives and cholesterol-lowering molecules, using environmentally-friendly technologies such as fermentation and enzymatic conversions to replace harmful chemical processes.

Headquartered in Singapore, the group has manufacturing sites and sales offices in China, India, Egypt, the Netherlands, Spain, the US and Mexico.

DSP is a market leader in enzymatic beta-lactam and statin APIs, with nearly 350 patented innovations in this field. Full backward integration gives a high level of control over its supply chain and the advantage of using its own high-quality APIs for its finished dosage formulations.

Sustainable antibiotics

All DSP's high-quality PureActives® APIs are manufactured using enzymes, which allow the production of APIs with a much lower CO_2 footprint versus comparable chemically manufactured products. DSP also takes a lead role in promoting sustainable antibiotics and the fight against antimicrobial resistance (AMR). DSP works with partners in the entire value chain to buy, use and sell responsibly made antibiotics.

DSP has implemented the basic requirements for clean and sustainable antibiotics production globally: it operates dedicated waste water treatment plants at all manufacturing sites in combination with antimicrobial activity testing. In 2016, DSP became a signatory company to the UN Industry Roadmap on combating AMR and also joined the Pharmaceutical Supply Chain Initiative, which brings together the pharmaceutical industry to formalize, implement and champion responsible supply chain practices.

DSP's leadership role in AMR was recognized by CEFIC, the European Chemical Industry Council, with the 2016 Responsible Care Award for Product Stewardship.

Patheon

x €million (100%)	**2016**[1]	2015[1]
Net sales	1,786	1,621
Adjusted EBITDA	364	366
Adjusted operating profit	247	191
Capital employed at 31 December	2,636	2,391

[1] Book year 1 November until 31 October

Patheon was formed in 2014 as part of a USD 2.6 billion transaction between JLL Partners and DSM, which combined the businesses of DSM Pharmaceutical Products and Patheon, Inc. The company is a leading global provider of outsourced pharmaceutical development and manufacturing services ranging from formulation development to clinical and commercial-scale manufacturing, packaging, and life cycle management. The company is positioned to add scale, new value chain capabilities and technologies, as well as to expand its end-to-end service offerings as a comprehensive solution to support above-market growth and enhanced profitability.

On 26 July 2016, the company completed an initial public offering (IPO) of 34,226,191 ordinary shares at the price of USD 21.00 per share. As part of the IPO, DSM sold approximately 4.8 million shares. These led to a gain of

€ 232 million in the third quarter of 2016. DSM currently has a shareholding of approximately 34% in Patheon.

Patheon has continued to transform itself, having completed and successfully integrated five accretive acquisitions in the past five years. To further its growth, the company announced on 28 November 2016 that it will acquire a state-of-the-art API manufacturing facility in Florence (South Carolina, USA) from Roche Holdings. With the addition of this site, Patheon expands its capacity for manufacturing highly potent compounds, and adds capabilities to support solid-state chemistry, micronization, and eventually, commercial spray-drying.

ChemicalInvest

x € million (100%)	2016	**2015**[1]
Net sales	1,802	756
Adjusted EBITDA	107	(3)
Adjusted operating profit	(36)	(32)
Capital employed at 31 December	556	566

[1] Started 31 July 2015

ChemicalInvest is a global leader in the production and supply of caprolactam and a leading European supplier of acrylonitrile and composite resins. DSM has a 35% shareholding in the company.

Caprolactam
Caprolactam is the raw material for polyamide 6 (PA6), also known as nylon 6. PA6 is used in diverse applications, ranging from carpets and textiles to car parts, electrical devices and packaging film. The caprolactam business operates under the Fibrant name. On 30 June 2016, Fibrant LLC announced the wind-down of its caprolactam production facility in Augusta (Georgia, USA), with caprolactam production at the site ceasing early November. The drawing rights contract in North America has been continued through another sourcing set-up via Fibrant.

Acrylonitrile
ChemicalInvest is also a leading supplier in the European merchant acrylonitrile market. Acrylonitrile is a raw material for acrylic fibers, plastics, rubber, water treatment chemicals and a wide range of specialty products. This business operates under the name AnQore.

Composite Resins
Composite Resins is a leading supplier in the European market and also has a production site in China. It provides resins solutions for lightweight composites used in trucks and trains, bridges, building facades, wind-turbine blades and trenchless pipe renovation. The Composite Resins business is branded Aliancys.

Financial and reporting policy

Financial policy

As a basis for and contribution to effective risk management and to ensure that the company is able to pursue its strategies, even during periods of economic downturn, DSM aims to retain a strong balance sheet and limit its financial risks.

DSM's Strategy 2018: *Driving Profitable Growth* has ambitious strategic and financial targets that are outlined on page 14. Within the context of this strategy, DSM aims to maintain a strong investment grade long-term credit rating.

Most of DSM's external funding needs are financed through long-term debt. Debt covenants are not included in the terms and conditions of outstanding bonds and financing arrangements. DSM aims to spread the maturity profile of outstanding bonds in order to have adequate financial flexibility.

An important element of the company's financial policy is the allocation of cash flow. DSM primarily allocates cash flow to investments aimed at strengthening its business positions and securing the dividend payments to its shareholders. Remaining cash flow is further used for acquisitions and partnerships that strengthen DSM's competences and market positions in health, nutrition and materials.

DSM aims to provide a stable, and preferably rising, dividend. Dividends are paid out in cash or in the form of ordinary shares at the option of the shareholders, with a maximum of 40% of the total dividend amount available for stock dividend.

In order to cover its commitments under the dividend policy and under management and employee option plans, DSM buys back shares insofar as this is necessary and feasible. In the year, 5,200,000 shares were repurchased to meet these obligations (2015: 2,300,000 shares).

It is company policy to hedge 100% of the currency risks resulting from sales and purchases at the moment of recognition of trade receivables and payables. Additionally, operating companies may – under strict conditions – opt to hedge currency risks from firm commitments and forecasted transactions. The currencies giving rise to these risks are primarily USD, CHF, JPY and GBP. The risks arising from currency exposures are regularly reviewed when appropriate.

A business or partner that is targeted for acquisition should add value to DSM in terms of technological or market competences. Acquired companies are in principle required to contribute to DSM's cash earnings per share from the very beginning and to earnings per share from the second year. In addition, they are required to meet the company's profitability, sustainability and growth requirements. However, such requirements may not be appropriate in the case of small, innovative growth acquisitions, although the sustainability requirement will be upheld at all times.

DSM's policy in the various sub-disciplines of the finance function is strongly oriented toward solidity, reliability and protection of cash flows. The finance function plays an important role in business steering.

For detailed information on DSM's tax policy, see 'Taxation at DSM' on the company website.

Reporting policy

Reporting policy and justification of choices made

In this Report, DSM reports for the calendar year 2016. The company reports on its People, Planet and Profit information in such a Report on an annual basis. The previous DSM Integrated Annual Report was published on 1 March 2016.

In the Report by the Managing Board, DSM explains its vision and policy with respect to sustainability practices and reports on its activities in this field during 2016. In addition to disclosing data and developments in the categories of People, Planet and Profit, DSM also reports on the global societal megatrends that drive its strategy, its sustainability strategy, its sustainability governance framework, stakeholder engagement activities, and management approach on material topics. DSM proactively seeks out the views of its key stakeholders on issues of material importance to the company.

UN Global Compact

DSM has been a signatory to the UN Global Compact since 2007 and commits to annually report on progress in implementing the UN Global Compact's 10 Principles in the areas of human rights, labor, the environment and anti-corruption. This Report is DSM's Communication on Progress 2016, submitted to the UN Global Compact Office. DSM's Code of Business Conduct, its Sustainability, Human Resources, and Safety, Health and Environment (SHE) policies, and its Supplier Sustainability Program are the foundations on which DSM applies the standards of the Global Compact.

DSM has also aligned its sustainability strategy with the Sustainable Development Goals (SDGs). DSM is familiar with the opportunities and responsibilities that the SDGs represent for DSM's business, and while our mapping shows that we contribute to all of them, we have chosen to focus on the goals which most closely align with our strategic ambitions. In this report, we have started to build the SDGs into our reporting process, for example by mapping SDG reporting priorities in our value creation model, and our material topics.

Principles of the UN Global Compact[1]

		DSM Code of Business Conduct and relevant page(s) in the Integrated Annual Report 2016
Principle 1	Support of human rights	page 28, page 32, page 47, page 98
Principle 2	Exclusion of human rights violation	page 28, page 32, page 47, page 98
Principle 3	Observance of the right to freedom of association	page 47, page 98
Principle 4	Abolition of all forms of forced labor	page 47, page 98
Principle 5	Abolition of child labor	page 47, page 98
Principle 6	Elimination of discrimination	page 12, page 43, page 44, page 98, page 100
Principle 7	Precautionary environmental protection	page 12, page 49 to page 55
Principle 8	Specific commitment to environmental protection	page 25 to page 26, page 49 to page 55
Principle 9	Diffusion of environmentally friendly technologies	page 12, page 22, page 29, page 49 to page 55, page 65 to page 86
Principle 10	Measures to fight corruption	page 28, page 98 to page 100, page 103 to page 106

[1] In 2016, DSM once again renewed its commitment to the UN Global Compact's CEO Water Mandate; see 'Stakeholder engagement' on page 26

Global Reporting Initiative

DSM bases its sustainability reporting on international non-financial reporting guidelines. For this Report, the company used the Global Reporting Initiative (GRI) Standards. DSM is constantly (re-)assessing to what extent sustainability aspects become material to DSM and its stakeholders. In case specific indicators become relevant to the company's sustainability performance, appropriate actions are taken that allow the necessary data to be collected so as to be able to disclose progress in the future. A detailed overview of how DSM reports according to the GRI Standards comprehensive indicators, including a reference to relevant sections in this Report, is provided on the company's Integrated Annual Report website.

Integrated Reporting Framework

DSM aligns with the recommendations of the International Integrated Reporting Council <IR> Framework where possible. The intention of the <IR> Framework is to provide additional guiding principles and content elements for an integrated report. Aligning with the framework allows DSM to better identify and communicate how it creates value for DSM's stakeholders in People, Planet and Profit, as well as the interconnection between these three dimensions.

Selection of topics

The topics covered in this Report were selected on the basis of input from internal and external stakeholders and the related materiality analysis, which assessed the relevance and impact of selected topics for DSM and its various stakeholders. On the basis of the principle of materiality (using the GRI Standards), DSM distinguishes between topics whose importance warrants publication in this Report (relevant to both DSM and its stakeholders), and topics whose importance warrants publication on the company website only (topics important to either DSM or its stakeholders). DSM reports on a selection of its external recognition in the chapters 'Stakeholder engagement' on page 24 and 'Review of business in 2016' on page 62. Other examples of external recognition can be found on the company website.

Scope
The People, Planet and Brighter Living Solutions data in this Report cover all entities that belong to the scope of the Consolidated financial statements, provided that DSM also has operational control. As such, three small units have been excluded from the scope. Planet reporting covers manufacturing units where commercial production by DSM occurs.

Acquisitions and divestments
The HR data (People) for newly acquired companies are reported from the first full month after the acquisition date. The Safety, Health (People), Environment (Planet) and Brighter Living Solutions data for newly acquired companies are reported at the latest in the year following the first full year after acquisition, because these companies' reporting procedures first have to be aligned with those of DSM. In the case of divestments, safety data are consolidated until the moment of divestment and planet data are reported to the last full year at DSM.

Planet methodology
The progress on the key environmental performance indicators is evaluated and established on a yearly basis. Data on these indicators are collected bi-annually for DSM's large and medium-sized sites. Small sites report annually. The data for the DSM sites are based on these sites' own measurements and calculations, which are based on definitions, methods and procedures established at corporate level. The site managers of reporting units are responsible for the quality of the data. Data are collected based on measurements and calculations in the production processes, information from external parties (e.g. on waste and external energy) and estimates based on expert knowledge.

Reporting units have direct insight into their performance compared to previous years and are required to provide justifications for deviations above the threshold. For most parameters, the threshold is set at 10%. The year-on-year comparability of the data can be affected by changes in the portfolio as well as by improvements made in the measurement and recording systems at the various sites. Whenever impact is relevant, it is stated in the Report. Details for the individual sites as well as the methodology and calculations are published on the company website, together with an explanation of the definitions used.

People methodology
People and HR data are collected per business group and consolidated at corporate level.

Brighter Living Solutions
In 2016, DSM changed the reporting of its sustainability as a growth driver KPI from ECO+ to Brighter Living Solutions to include People+, reflecting the company's steering on the impact of both Planet and People. For a definition of Brighter Living Solutions, see 'Brighter Living Solutions' on page 22. DSM reports twice yearly the percentage of Brighter Living Solutions within its running business portfolio.

The sustainability assessments to support the qualification for Brighter Living Solutions (ECO+ and People+ consolidated) are made by internal Life Cycle Assessment (LCA) experts and reviewed using the four-eyes principles with at least one internal, independent senior LCA consultant. The financial data are validated with the Corporate Sustainability department and consolidated as DSM Brighter Living Solutions KPI performance and reviewed by Group Control & Accounting.

Corporate governance and risk management

Introduction

Koninklijke DSM N.V. (Royal DSM) is a company limited by shares listed on Euronext Amsterdam, managed by a Managing Board together with an Executive Committee and with an independent Supervisory Board. Members of the Managing Board and the Supervisory Board are appointed (and, if necessary, dismissed) by the General Meeting of Shareholders.

The company is governed by Dutch law and by its Articles of Association, which can be consulted on the company website. The General Meeting of Shareholders decides on an amendment to the Articles of Association by an absolute majority of the votes cast. A decision to amend the Articles of Association may only be taken at the proposal of the Managing Board, subject to approval of the Supervisory Board.

DSM fully informs its stakeholders about its corporate objectives, the way the company is managed and the company's performance. Its aim in doing so is to pursue an open dialogue with its shareholders and other stakeholders.

DSM has a decentralized organizational structure built around business groups that are empowered to carry out all short-term and long-term business functions. In 2015, DSM announced a number of adjustments to its organizational structure related in particular to its support and corporate functions as well as its regional organizations. The new organizational and operating model has created more clarity between businesses, regions and support and corporate functions. At the operational level, the business groups remain the cornerstones of the organization.

Managing Board & Executive Committee

Since 2015, DSM’s management structure has been strengthened by the establishment of an Executive Committee. The Executive Committee enables faster strategic alignment and operational execution by increasing focus on the development of the business, innovation and people. The members of the Executive Committee are the Managing Board members as well as four senior managers appointed by the Chairman of the Managing Board after consultation with the Supervisory Board. The Executive Committee focuses on topics such as the overall strategy and direction, review of business results, functional and regional strategies, budget setting, and people and organization.

The statutory responsibilities of the Managing Board have remained unchanged. The Managing Board is ultimately responsible for the company's strategy, its portfolio management, the deployment of human and capital resources, the company’s risk management system, the company's financial performance and its performance in the area of sustainability.

The Managing Board consists of three or more members, to be determined by the Supervisory Board. The current composition of the Managing Board can be found in the chapter ‘Supervisory Board and Managing Board Royal DSM’ on page 120. Since 2005, members of the Managing Board have been appointed for a period of four years.

The members of the Managing Board are collectively responsible for the management of the company. Notwithstanding their collective responsibility within the Managing Board, certain tasks and responsibilities for business clusters and functional areas as well as regional responsibilities have been assigned to individual members. This distribution of tasks is published on the company website.

The remuneration of the members of the Managing Board is determined by the Supervisory Board based on the remuneration policy approved by the General Meeting of Shareholders. The remuneration policy for the Managing Board can be found in the 'Report by the Supervisory Board' under ‘Remuneration policy for the Managing Board’ on page 114.

The functioning of and decision making within the Managing Board and Executive Committee are governed by the Regulations of the Managing Board, which are in accordance with the Dutch corporate governance code and can be found on the company website.

In 2016, the Managing Board had 18 formal meetings and 35 Executive Committee meetings, some of them by teleconference. No Managing Board members had to be excused from meetings during the year. In 10 Executive Committee meetings, a member was excused due to other commitments. In all cases, members who were unable to attend provided any input they had to the meeting in advance in writing or via other members.

Supervisory Board

The Supervisory Board consists of at least five members. The current composition of the Supervisory Board can be found in the chapter ‘Supervisory Board and Managing Board Royal DSM’ on page 120. Members of the Supervisory Board are appointed for a period of four years with a current maximum of three four-year terms.

All current members of the Supervisory Board are independent in accordance with the Dutch corporate governance code. The remuneration of the members of the Supervisory Board is determined by the General Meeting of Shareholders. The functioning of and decision making within the Supervisory Board are governed by the Regulations of the Supervisory Board, which are in accordance with the Dutch corporate governance code and can be found on the company website.

The Supervisory Board supervises the policy pursued by the Managing Board, the Managing Board's performance of its managerial duties and the company's general course of affairs, taking the interests of all the company's stakeholders into account. The annual financial statements are approved by the Supervisory Board and then submitted for adoption to the Annual General Meeting of Shareholders, accompanied by an explanation by the Supervisory Board of how it carried out its supervisory duties during the year concerned.

In line with the Dutch corporate governance code, the Supervisory Board has established from among its members an Audit Committee, a Nomination Committee, and a Remuneration Committee, besides which there is also a Sustainability Committee.

The task of these committees is to prepare the decision making of the Supervisory Board. These committees are governed by charters that have been drawn up in line with the Dutch corporate governance code and can be found on the company website.

Diversity

DSM strongly values diversity and endeavors to reflect this in its Board memberships. Given the relatively small number of Managing Board members, the composition of the Managing Board in 2016, with one female and three male members, came very close to the 30% prescribed by Dutch legislation, requiring a large company to strive to achieve a balanced composition of its Boards in terms of gender, to the effect that at least 30% of the positions are held by women and at least 30% by men. The current composition of the Supervisory Board is well balanced, in terms of both gender and nationalities, and is in line with Dutch legislation in this regard. More than one third of the members are women (of the seven Supervisory Board members, three are female and four are male). Furthermore, in the Supervisory Board of DSM Nederland B.V., a subsidiary of Royal DSM, one of the three members is female.

General Meeting of Shareholders

The main powers of the General Meeting of Shareholders relate to:

- the appointment, suspension and dismissal of members of the Managing Board and the Supervisory Board;
- approval of the remuneration policy of the Managing Board;
- approval of the remuneration of the Supervisory Board;
- the adoption of the annual financial statements and declaration of dividends;
- release from liability of the members of the Managing Board and the Supervisory Board;
- issuance of shares or rights to shares, restriction or exclusion of pre-emptive rights of shareholders and repurchase or cancellation of shares;
- amendments to the Articles of Association; and
- decisions of the Managing Board that would entail a significant change in the identity or character of DSM or its business.

The Annual General Meeting of Shareholders is held within six months of the end of the financial year in order to discuss and, if applicable, approve the annual report, the annual accounts, any appointments of members of the Managing Board and the Supervisory Board, and any of the other topics mentioned above.

The Annual General Meeting of Shareholders and, if necessary, other General Meetings of Shareholders are called by the Managing Board or the Supervisory Board. The agenda and explanatory notes are published on the company website.

According to the Articles of Association, shareholders who, individually or jointly, represent at least 1% of the issued capital have the right to request to the Managing Board or the Supervisory Board that items be placed on the agenda. Such requests need to be received in writing by the Chairman of the Managing Board or the Supervisory Board at least 60 days before the date of the Annual General Meeting of Shareholders.

The Annual General Meeting of Shareholders was held on 29 April 2016. The agenda was to a large extent similar to that of previous years. Additional topics were the appointment of Pradeep Pant and the reappointments of Eileen Kennedy and Victoria Haynes as members of the Supervisory Board. One agenda item relating to an amendment of the Articles of Association was withdrawn prior to the meeting. Further details can be found on the company website.

Dutch corporate governance code

DSM supports the Dutch corporate governance code adopted in 2003 and amended in 2008, which can be found on www.commissiecorporategovernance.nl. DSM confirms that it applies all of the 113 Best Practices contained therein.

In 2016, the Monitoring Committee worked on an update to the Dutch corporate governance code, which was published on 8 December 2016 and will be applicable as of financial year 2017. DSM will ensure its continued compliance with the Dutch corporate governance code.

With respect to the appointment of members of the Managing Board for a period of at most four years (Best Practice II.1.1) it should be noted that DSM has adhered to this Best Practice since the introduction of the corporate governance code in 2004.

Since DSM respects agreements made before the introduction of said code, the current Chairman of the Managing Board will remain appointed for an indefinite period.

Any substantial change in the corporate governance structure of the company and in the company's compliance with the code shall be submitted to the General Meeting of Shareholders for discussion under a separate agenda item.

All documents related to the implementation of the Dutch corporate governance code at DSM can be found in the 'Corporate Governance' section of the company website.

Governance framework

Organizational & operating model
Business groups are the main building blocks of DSM's organization; they have integral long-term and short-term business responsibility and have at their disposal all functions that are crucial to their business success. As the primary organizational and entrepreneurial building blocks, they focus on four primary business functions: Innovation and R&D, Direct Sourcing, Manufacturing & Operations and Marketing & Sales. Intra-company product supplies are contracted by the business groups on an arm's length basis.

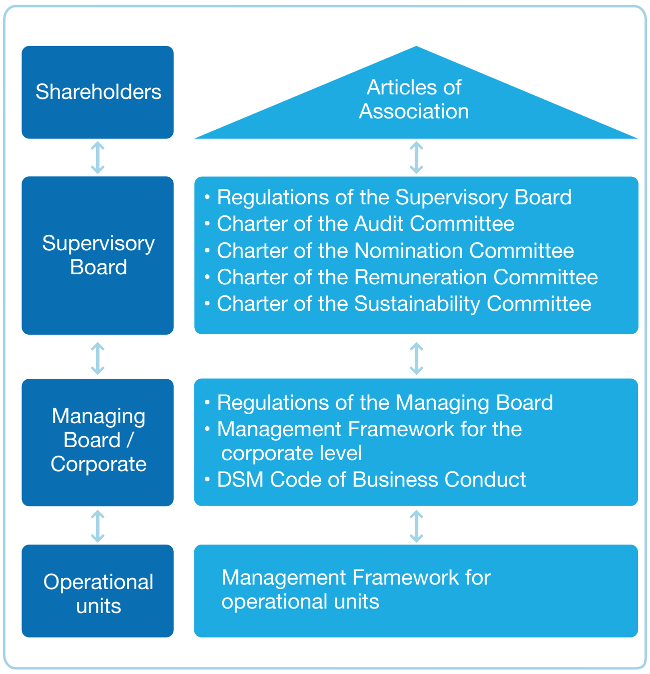
The business groups are grouped into clusters, thus ensuring coherence of operations and the leveraging of resources within the cluster. The clusters are the main organizational entities for external strategic and financial reporting. This structure ensures a flexible, efficient and fast response to market changes. In order to ensure sufficient independence with regard to financial management, the Chief Financial Officer (CFO) has no business groups reporting to her.

DSM's business groups receive services from global support functions and functional excellence departments and are supported by the regional organizations. This set-up enables DSM to create a global high-performing organization focused on meeting its targets and ambitions. The support functions and functional excellence departments are paid for the services they supply by the users, which are for the largest part the business groups and to a lesser extent other DSM units. Corporate departments are paid from a corporate budget.

Support functions provide those services that can be delivered more efficiently (in terms of total cost of ownership for DSM) by leveraging them across the company, thus capturing scale-benefits and delivering higher quality at lower cost, rather than having them arranged in each business group separately. Within support functions, centers of expertise provide specialist support, while shared service centers provide standard transactional support. Business partnering is the concept that acts as the interface between the business groups and the support functions. Business partners consequently have a second reporting line in the business. In order to ensure that the functional policies sufficiently reflect regional requirements, the support functions work closely with the regional organizations and integrate their advice. Each support function reports to a Managing Board member. There are support functions in the areas of Finance, People & Organization, Legal, Indirect Sourcing, Communications and IT. In the new operating model, corporate functions (small, high-level groups) supporting the Managing Board and Executive Committee are also seen as support functions. Corporate departments are Corporate Strategy & Acquisitions, Corporate Operational Audit, Corporate Risk Management, Corporate Sustainability, Corporate Investor Relations and Corporate Affairs.

Functional excellence departments are mandated by the Managing Board to help the businesses to achieve excellence. They cover the areas of Operations & Responsible Care, Marketing & Sales and Science & Technology. Functional excellence departments support businesses in improving their performance and provide guidance in setting aspiration levels and targets.

Governance framework
The following figure depicts DSM's overall governance framework and the most important governance elements and regulations at each level.



For the sake of clarity, a short summary of the main aspects of the framework at Managing Board/corporate level and operational level is given here:

- The Managing Board and Executive Committee adhere to the Regulations of the Managing Board.
- The Managing Board and Executive Committee work according to the Management Framework for the corporate

level. This implies among other things that they adhere to the DSM Code of Business Conduct and applicable corporate policies and requirements. The Management Framework for the corporate level further provides a description of the most important (decision making) processes, responsibilities and 'rules of the game' at the Managing Board and Executive Committee, functional and regional levels and includes the governance relations with the next-higher levels (Supervisory Board and shareholders) and the operational units.

The company's strategic direction and objectives are set in a Corporate Strategy Dialogue. The outcome of the most recent Corporate Strategy Dialogue was presented in November 2015 and is described in detail in DSM's Integrated Annual Report 2015 and on the company website.

The operational units conduct their business within the parameters of the Management Framework for operational units. This implies among other things that they:

- comply with the DSM Code of Business Conduct, Corporate Requirements and Directives;
- establish the strategy, objectives and operational targets of their business according to the Business Strategy Dialogue, aligned with the Corporate Strategy Dialogue, and in which various scenarios and related risk profiles are investigated, and report on the achievement thereof;
- implement risk management actions according to an Annual Risk Management Plan and in line with corporate policies;
- execute DSM-wide standards for support functions (systems, processes, vendors, etc.); and
- execute the annual functional improvement plans, and monitor the effectiveness of the risk management and internal control system and regularly discuss the findings with the Managing Board and Executive Committee.

The frequency of auditing the operational units is based on the risk profile of the respective unit; on average this happens once every three to four years and is conducted by the Corporate Operational Audit (COA) department. The director of COA reports to the CFO and has access to the Chairman of the Managing Board, the external auditor and the Chairman of the Audit Committee of the Supervisory Board. Furthermore, the director of COA acts as the compliance officer with regard to inside information and is the secretary of the Disclosure Committee, as well as being chairman of the DSM Alert Committee, which is responsible for the DSM whistleblower policy, systems and processes. Chaired by the CFO, the Disclosure Committee ensures the timely and accurate disclosure of share price sensitive information related to the Company and is responsible among other things for the implementation of the DSM rules on the holding and execution of transactions in DSM financial instruments. In the Fraud Committee, relevant corporate functions participate under the chairmanship of the CFO. The objective of the committee is to ensure structural follow-up of fraud cases with the aim of reducing fraud risks.

Sustainability Governance Framework

Managing Board

Sustainability falls under the responsibility of the Managing Board. While CEO/Chairman of the Managing Board Feike Sijbesma is the primary point of contact, other members also chair sustainability topics and initiatives. In 2016:

- Feike Sijbesma oversaw sustainability as a key responsibility and company value as well as a business growth driver. He also oversaw DSM's engagement with organizations including the United Nations and the World Bank, and the strategic partnership with the World Economic Forum;
- Stephan Tanda was responsible for Safety, Health and Environment (SHE), and chaired the Inclusion & Diversity Council. He was the primary contact for DSM's partnership with the UN World Food Programme and other nutrition-related initiatives;
- Geraldine Matchett took care of integrating sustainability into financial decision making and represented DSM in the Accounting for Sustainability (A4S) CFO Leadership Network; and
- Dimitri de Vreeze oversaw DSM's Supplier Sustainability Program and the sourcing of electricity from renewable sources in his responsibility for the Sourcing function.

Supervisory Board

DSM's Supervisory Board has appointed its own Sustainability Committee to oversee progress against targets and report on the embedding of sustainability across the organization. For more details see 'Supervisory Board report' on page 108.

External Sustainability Advisory Board

Comprising a diverse international group of thought leaders, DSM's Sustainability Advisory Board acts as a sparring partner for the Managing Board and senior executives, to help sharpen their focus on strategic issues, deepen their understanding of external stakeholder needs, conduct advocacy and handle dilemmas. This board met twice in 2016 together with the Managing Board and a number of senior executives. Subjects discussed included DSM's corporate sustainability strategy, new business opportunities, sustainability and finance, sustainable animal proteins, and social innovation in Africa. The outcomes from such discussions led to recommendations and potential changes to DSM's approach to its strategy and management of topics. This board also took the opportunity to host, together with members of the Managing Board, a round table with a number of DSM's young professionals to discuss the topic: "The world with a climate deal: what has changed and what not?" They also joined DSM staff to celebrate being once again named worldwide sustainability leader in the Materials industry group in the Dow Jones Sustainability World Index. During the year, DSM welcomed new members Ndidi Nwuneli and Jessica Fanzo to this board; a further member, Robin

Chase, joined in January 2017. Sadly, Sustainability Advisory Board member Pamela Hartigan passed away in August. Pamela brought clear and insightful perspectives on social entrepreneurship and social innovation, and will be dearly missed.

Sustainability Advisory Board

Member	Background
Robin Chase (f)[1]	Co-founder and former CEO of Zipcar, co-founder and board member of Veniam, board member of the World Resources Institute, and Tucows, and serves as an advisor to the French National Digital Agency and the USDOT's Advisory Committee on Automated Transportation. Nationality: American.
Jessica Fanzo (f)	Bloomberg Distinguished Associate Professor of Ethics and Global Food & Agriculture at the Johns Hopkins Berman Institute of Bioethics, the School of Advanced International Studies (SAIS), and the Bloomberg School of Public Health, Department of International Health, and Director of the Global Food Ethics and Policy Program (all based in the US). She has previously held positions in nutrition advisory, advocacy and research organizations in the US, Italy and Kenya. Nationality: American.
Paul Gilding (m)	Independent writer and corporate advisor on sustainability. Fellow at University of Cambridge Institute for Sustainability Leadership (UK). In 2011 he published his book "The Great Disruption". In the 1990s, he was executive director of Greenpeace International. Nationality: Australian.
David King (m)	Special representative for climate change of the UK government since 2013. From 2008 to 2012, he served as the founding director of the Smith School of Enterprise and the Environment at the University of Oxford (UK). Chief Scientific Advisor to the UK government 2000-2007. Nationality: British.
Ndidi Nwuneli (f)	Social entrepreneur and Founder of LEAP Africa and co-founder of AACE Food Processing & Distribution Ltd. (AACE Foods), an indigenous agro-processing company in Lagos (Nigeria). She is also a partner at Sahel Capital, an advisory and private equity firm focused on the agribusiness and manufacturing sectors in West Africa. Nationality: Nigerian.
Ye Qi (m)	Cheung Kong professor of Environmental Policy and director of Brooking-Tsinghua Center for Public Policy at Tsinghua University in Beijing (China). Before he joined Tsinghua, he taught at Beijing Normal University, and the University of California at Berkeley (California, USA). Nationality: American.

[1] Joined January 2017

Global network

At a corporate level, sustainability is steered by the Sustainability Leadership Team, a group of senior executives representing the business groups and contributing corporate functions, which is chaired by the Vice President Sustainability. He leads the Corporate Sustainability department and reports directly to CEO Feike Sijbesma. The aim of the Corporate Sustainability staff is to be a business-oriented center of excellence and partner on sustainability, internally and externally.

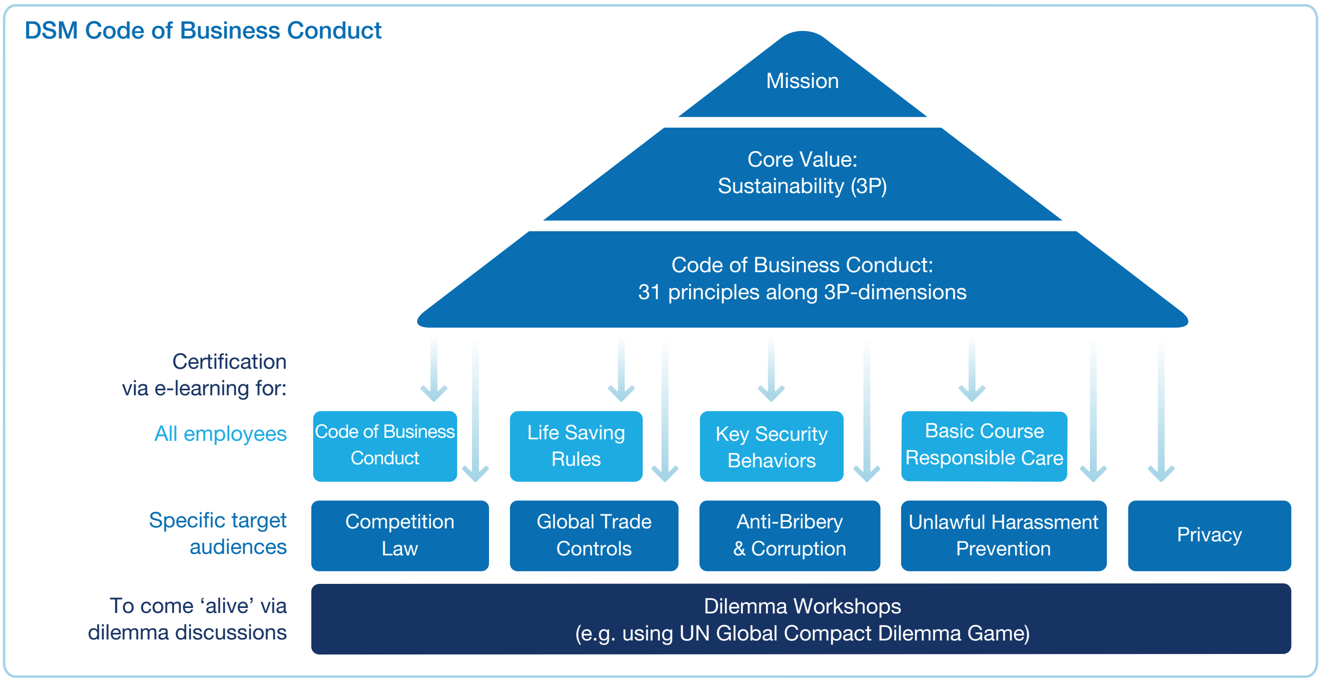
The Sustainability Leadership Team meets quarterly to monitor the progress of sustainability across the company, with particular emphasis on steering the company's business and innovation portfolio on key drivers. Regional operational sustainability networks are in place in China, India, Latin America, and North America.

The DSM Operations & Responsible Care department is responsible for all corporate issues related to SHE. The Senior Vice President DSM Operations & Responsible Care reports directly to the Managing Board. SHE managers provide support at business group level. The DSM SHE Council, which includes all business group SHE managers, is instrumental in sharing experiences and developing practices and communications on SHE issues.

DSM Code of Business Conduct

Business principles

The DSM Code of Business Conduct ('the Code'), as introduced and rolled out from 2010, contains the company's business principles across the three dimensions of People (11 principles), Planet (5 principles) and Profit (15 principles). These principles translate DSM's mission and core value – sustainability – into daily practice across its business operations. All DSM employees are expected to act in accordance with the Code, and the Managing Board holds DSM's unit management accountable for compliance. The Code is now available to employees in 19 languages and the full text of the Code can be found on the company website. An update to the Code and the corresponding training is foreseen in the course of 2017. This update will make the Code more concise and strengthen the business principles of the Planet dimension.



Umbrella function

The Code serves as an umbrella for several other DSM regulations and together they form the basis for the company's ethical business behavior. These regulations are often supported by e-learning programs to train employees. Depending on the subject, this concerns either all employees or selected employees with a specific role in the organization. Integration and compliance plans, comprising among other things risk management and training on values, are rolled out whenever DSM acquires a business. DSM regulations cover the three dimensions of People, Planet and Profit, of which the most important are listed below:

People: To support DSM's ambition to create an incident-free and injury-free workplace, the Life Saving Rules specify the 12 most important rules that must be followed by all employees to prevent serious or fatal incidents. An overarching Human Rights position paper bringing together existing human rights-related policies and procedures has been published on the company website. For more information, see 'Human rights' on page 47.

The Unlawful Harassment Prevention e-learning emphasizes the importance of the cultural, diversity and non-discrimination aspects of the Code and focuses on effective employee relations, communications, and non-discriminatory practices in the workplace.

The DSM Privacy Code for Employee Data and the DSM Privacy Code for Customer, Supplier and Business Partner Data prescribes a mandatory training for Privacy Officers, human resources employees, legal counsels and employees who work with personal data on a regular basis. The related Privacy e-learning initiated in 2015 was further rolled out in 2016.

Planet: The Basic Course Responsible Care addresses the elements of the Responsible Care Program: Safety, Health and Environment; Product Stewardship; Security and Sustainability. Because of the importance of the Responsible Care principles for all functions and roles within the company, this course is mandatory for all DSM employees, as well as for selected contractor employees.

Profit: DSM has e-learnings for Global Competition Law Principles and Practices and Global Trade Controls. Compliance with these subjects is structurally embedded in DSM's systems and processes. As part of the global trade controls compliance process, DSM master data is screened to check customers and suppliers against embargoes and lists of sanctioned parties.

The DSM Anti-Bribery and Corruption (ABC) Policy and Compliance Manual has been communicated to targeted employees in commercial and business roles since 2014. Supporting classroom training and a refresher of the ABC e-learning was further rolled out in 2016. Special attention has been given to DSM's employees and businesses in China, including the provision of a Chinese translation of the DSM ABC Policy and Compliance Manual, an easy-to-use ABC checklist for business people, and ABC classroom trainings in addition to the Competition Law classroom program. During the year a new ABC due diligence program was introduced with regard to agents and distributors. Relevant information on all these parties will be collected by questionnaire; independent audits of these parties may be conducted depending on the possible risks involved.

The Security e-learning covers all key security topics relevant to DSM's business, including DSM's seven Key Security Behaviors. To complete the e-learning, participants are required to read and sign off on the DSM Code of Conduct for Information Security. A classroom version of the training is available for locations without access to e-learning facilities.

DSM also has rules in place on the holding of and execution of transactions in DSM financial instruments and certain other financial instruments related to trading in DSM shares, and if applicable, shares and related financial instruments in other companies. These apply to all relevant DSM employees, including the members of the Managing Board and the Supervisory Board.

Value chain

The business principles most relevant for the supply chain are brought together in the Supplier Code of Conduct and structured along the three sustainability dimensions of People, Planet and Profit. The Supplier Code of Conduct (available on the company website in eight languages) is signed off by suppliers in framework contracts, whereby they confirm their commitment to sustainability among other things. For distributors' and agents' contracts, the ABC Policy is being translated into terms and conditions to ensure ethical business conduct when these third parties are acting on behalf of DSM or dealing with DSM's products further down the value chain.

Training and awareness

DSM employees must refresh their training on the Code every two years. The implementation of this training program continues to progress well. At year-end, over 95% of all DSM employees had completed (or refreshed) their training, excluding employees of some businesses acquired recently. Parts of the training program are offered by the business units to selected contractor employees as well as to employees in DSM's joint ventures.

A Code Review Team, chaired by the Vice President Corporate Risk Management, monitors implementation of the values training program as well as internal and external developments concerning corporate ethics to promote and safeguard the company's values and reputation. Global monitoring and reporting is in place for all of the values trainings in DSM's learning management system.

People: At the end of 2016, well over 95% of all DSM employees had completed the Life Saving Rules training, underlining the importance of safety within DSM. The Unlawful Harassment Prevention training also has a very good implementation level among relevant employees (98%). The target audience for the Data Privacy Knowledge course was broadened and further rolled out in 2016 and 90% of the targeted employees have already completed this training.

Planet: The Basic Course Responsible Care has now been successfully followed by over 95% of the employee population.

Profit: The first refresher to the ABC e-learning has been rolled out in 2016; taken over the year, this has been followed by more than 90% of all employees within the ABC target group. The training for Global Trade Controls and Security has been in place for longer and implementation levels remain good at 92% and 97% respectively. Additional training on Trade Controls Compliance has been given to zoom in on various business-specific aspects of this topic.

Those employees for whom competition laws are most relevant must complete an annual statement to confirm their compliance with the rules set forth in the DSM Competition Law Compliance Manual. In this statement they confirm that they are not aware of any violation of competition laws by DSM. Sign-off levels are excellent. Alleged breaches are reported to and discussed with Group Legal Affairs. In 2016, no breaches were reported and DSM was not subject to any investigation by competition authorities related to potential anti-competitive behavior.

Dilemmas

Living the Code can sometimes result in dilemmas that do not have a quick or clear answer. Dilemma workshops can be requested by the company's units to prepare for these cases using the UN Global Compact Dilemma Game as a tool. The workshops build on DSM's company culture, which is based on openness, fairness and trust. The aim is to create an open-minded atmosphere in which dilemmas can be discussed. These discussions are used to calibrate 'what is right' and 'what is wrong' in order to continuously improve business integrity in daily operations.

Letter of Representation

At the end of each year, the management of all 32 operational units directly reporting to the Managing Board (business groups, regions, others) sign off on a Letter of Representation. With this they confirm the compliance of the unit and its employees with applicable laws and regulations, the Code and related values trainings as well as corporate policies and requirements.

Consequence management

DSM applies zero-tolerance consequence management to violations of the Code. Under our whistleblower procedure (DSM Alert), most Code incidents are reported to, and dealt with by, local line management. In cases where reporting to line management is not considered appropriate, complaints are made directly to the DSM Alert Officer. In all cases, consequence management practices are in place (e.g. official warning, temporary suspension, dismissal) to support compliance with the Code. The DSM Alert Officer reports to the Managing Board and reports independently to the Audit Committee of the Supervisory Board twice a year. People who are not DSM employees but wish to raise a concern regarding a violation of the Code can also contact the DSM Alert Officer via the company website.

In 2016, 24 reports of a potential violation were received via the Alert channel, 3 of which were reported by an external person or party. While this is an increase compared to 2015 (16, of which 1 external report), it is broadly in line with the average of 22 alerts over the last 5 years. There were no bribery or corruption cases.

The table on the following page gives an overview of all reported Code violations, with a breakdown per Triple P dimension and per region. Proven serious violations of the Code can result in dismissal or other forms of consequence management. In line with this policy, 32 employees were dismissed in 2016 as a result of breaches of the Code or other legal or local company regulations. In addition, 76 cases were reported that have led to other kinds of consequence management (official warning or suspension). Overall this is at approximately the same level as 2015.

People: Most of the cases in the People dimension are related to violations of the Life Saving Rules or inappropriate behavior. Safety and health in the workplace has a priority for the company and incident-reporting channels are well known.

Planet: There were a few violations of the Code reported in the Planet dimension in 2016 due to seriously negligent or irresponsible behavior by employees. None of these violations led to serious environmental incidents.

Profit: Half of the cases that were reported in the Profit dimension were related to the incorrect registration of working hours. There were also a number of conflict of interest and fraud cases.

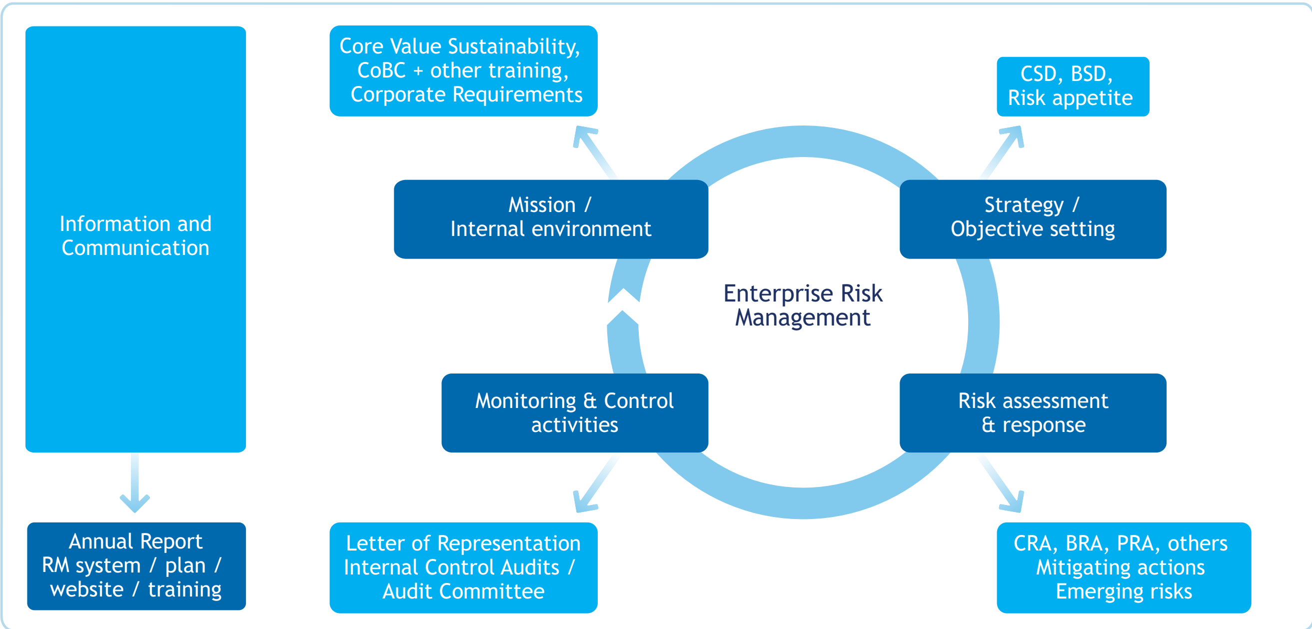
Code of Business Conduct	2016	2015
Training and awareness e-learning:		
% of targeted employees trained		
General		
- Code of Business Conduct	97%	96%
People		
- Life Saving Rules	99%	96%
- Unlawful Harassment Prevention	98%	-[1]
- Data Privacy Knowledge	90%	-[1]
Planet		
- Basic Course Responsible Care	98%	93%
Profit		
- Global Trade Controls	92%	90%
- Anti-Bribery and Corruption	93%[2]	94%
- Security	97%	93%
DSM Competition Law:		
% of targeted employees signed off		
- DSM Competition Law compliance annual statement	99%	100%
Violations of the Code:		
Number of dismissals/other consequence management		
Triple P breakdown		
- People	20/58	26/45
- Planet	3/5	0/0
- Profit	9/13	12/6
Regional breakdown		
- Europe & Africa	13/31	5/19
- Americas	14/37	27/30
- Asia-Pacific	5/8	6/2
Total	**32/76**	**38/51**
Alert cases (whistleblower procedure):		
Number substantiated/not substantiated/under investigation		
Triple P breakdown		
- People	11/7/3	3/10/0
- Planet	0/0/0	0/0/0
- Profit	2/1/0	3/0/0
Regional breakdown		
- Europe & Africa	2/2/0	2/1/0
- Americas	7/6/3	4/6/0
- Asia-Pacific	4/0/0	0/3/0
Total	**13/8/3**	**6/10/0**

1 No overall global data available for this period
2 Average of 4 quarters

Risk management

The Managing Board is responsible for risk management within DSM. With the support of the Corporate Risk Management department, which reports directly to the CFO, the Managing Board has designed and implemented a well-embedded risk management system and organization in all company units. Risk management at DSM is based upon the COSO-ERM framework, as depicted in the figure below, and this section is structured accordingly.

A full description of DSM's risk management system and process together with a description of the identified risks is available on the company website. These descriptions are to be considered an integral part of this Report.



Mission / Internal environment

Values and business principles are a key element of the internal environment for risk management and form the starting point for the risk management cycle. DSM's core value is sustainability, which is directly related to its mission to create brighter lives for people today and generations to come. All DSM employees receive regular training regarding values and business principles, covering generic and specific elements as required. This starts with an overarching training in the DSM Code of Business Conduct (CoBC) (see the company website) and is then further developed along the Triple P principles, whereby either all or else selected target groups of DSM employees are required to follow mandatory e-courses for risks related to People, Planet and Profit. See 'DSM Code of Business Conduct' on page 98.

- In 2016, the average implementation score across DSM for the values-related courses mentioned above further increased to more than 95%. This figure includes a new e-learning on Data Privacy Knowledge. Data protection is an area of increasing importance and societal interest. This course was introduced to increase awareness and further safeguard the data DSM holds on, for instance, employees, customers, suppliers and other partners in line with applicable legal requirements.
- In order to improve the effective use of the DSM Corporate Requirements, a number of these requirements were simplified during 2016, making it easier for target audiences to understand which elements of the requirements apply to them and how to effectively deploy them. Online tools have also been improved in support.

Strategy / Objective setting

- A corporate risk management plan has been developed to support the delivery of the strategic targets of DSM's Strategy 2018: *Driving Profitable Growth*. This plan also forms the basis for the individual units to define their risk management year plans at either business group, (support) function or regional level. This plan was updated and incorporated in the incentive system applicable to certain (senior) managers in 2016.
- An important precursor to risk assessments is the company's overall risk appetite, which is defined by the Managing Board. In 2016, DSM extended and updated its risk categories. This was followed by an update of the company's risk appetite by the Executive Committee. The risk appetite depiction has been updated to show a somewhat more 'hungry' position on Generic/strategic risks in 2016; this is acknowledged as being a better reflection of DSM's appetite, in particular with regard to innovation and talent management.

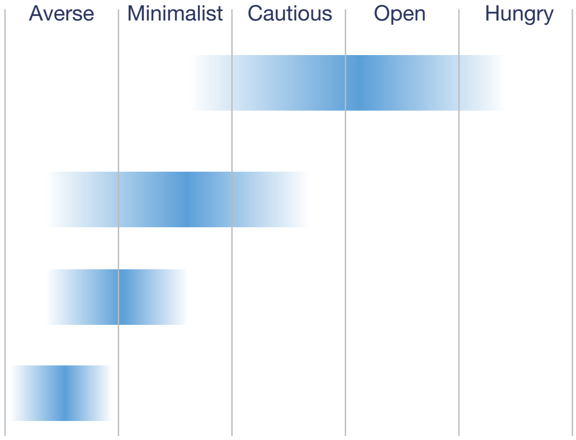
DSM's Risk appetite

Generic/strategic
(e.g.: Innovation, People/organization/culture, Intellectual property, Raw materials/energy, Price/availability, Acquisitions and partnerships, Divestments, Brand)

Operational
(e.g.: Reputation, Customer, Project management, Production process, (Information-) Security, Business continuity, Product liability, Safety, Health and Environment)

Financial and reporting
(e.g.: Liquidity and market, Reporting integrity, Pensions, Financial risks (e.g. credit, tax))

Legal and compliance
(e.g.: Legal non-compliance, Non-compliance with DSM Requirements)



Risk assessment and response

- Risk assessments and corresponding mitigation plans are carried out at various levels in the organization. The Managing Board is responsible for the Corporate Risk Assessment (CRA). The full Executive Committee reaches consensus about the top risks DSM is facing and how to mitigate these, as well as how to respond to other important risks. The Corporate Risks are discussed on a regular basis by the Executive Committee and owners are assigned for the various risk mitigation plans. Several risks were reduced during 2016, for instance through the roll-out of SAP-GRC access controls for continuous control monitoring, which has nearly been finalized. Meanwhile some new risk elements emerged as indicated below, especially in the top risks section. The Executive Committee also defined monitoring actions for a slightly higher number of emerging risks that DSM might face in the longer term (details below).
- Various opportunities have been defined to further strengthen how risks are being assessed and mitigated across the various units. DSM intends to further improve the quality of risk management facilitation, challenge, and the definition and monitoring of mitigation actions, both in its running businesses as well as in projects. Potential risk correlations were also discussed to prevent – as far as possible – a scenario with a potential 'domino effect' of risks; see 'Top risks' in this section.

Monitoring and reporting

Various means of monitoring and reporting are in place, including risk committees and ICT tools. These provide a robust and continuous overview of the functioning of the common controls and the mitigation of common risks. The following points should also be noted:

- The Letter of Representation (LoR), which all reporting units are required to sign, also confirms their reporting integrity and provides an additional platform to report material risks and incidents including possible reputational risks. In 2016, we further strengthened the LoR procedure by requesting the units to also report potential deviations from laws and regulations and/or the Corporate Requirements that may occur for a given period due to specific circumstances; for instance, it takes time to train the employees at a newly acquired unit in all of DSM's safety and ethical requirements. Another improvement in 2016 was the use of high-level risk findings, such as from the CRA and/or outside-in risk examples, to further complete and improve the quality of the LoR.
- Besides numerous external audits, DSM's risk managers also support internal audits to check the effectiveness of the internal controls and risk and incident mitigations. Independent audits, including unannounced audits, were executed by the Corporate Operational Audit (COA) department in a program that was agreed with the Executive Committee and the Audit Committee of the Supervisory Board.
- Building on a new COA approach to executing end-to-end process audits, DSM has concluded that it should further strengthen end-to-end operational risk management. DSM also believes that in case incidents do occur, more in-depth root cause analysis will ensure that learnings can be better extracted and shared to prevent recurrence in the future.
- The consolidated overview of all aforementioned risks, incidents, audits and mitigating actions is the basis for this risk section and the statements of the Managing Board in accordance with the Dutch Financial Markets Supervision Act at the end of this section. It is additionally provided in the risk management section of the half-year figures.

Control activities

Control activities are carried out by the appointed unit risk managers and related unit risk committees, who regularly review:

- compliance aspects such as the implementation of training on values, segregation of duties, and follow-up of audits from various stakeholders;
- the execution, follow-up and quality of the relevant set of risk assessments; and
- best practices from internal and external sources to further strengthen DSM's risk management cycle as well as to ensure appropriate risk management training for all employees at DSM.

DSM continued to implement new advanced ICT tools such as SAP-GRC covering access control, user provisioning and privileged user management for the majority of the company's units. After some delay due to the development of the new target operating model for the Finance function, the Financial Shared Service Center started work on a pilot for the further implementation of financial process controls.

Information and Communication

- Continuous efforts are made to inform employees about the DSM risk management system and train them in its use. In addition to the many initiatives from 2015 listed on the company website, the main 2016 deliverable was the further roll-out of updated and intensive risk management training programs in the US, China, Switzerland and the Netherlands.
- In 2016, DSM received external recognition for its risk management approach, being named best in class in this respect in the Dow Jones Sustainability World Index, while the Dutch AFM (Autoriteit Financiële Markten) highlighted DSM's reporting on Risk appetite and Top risks as good practices.

The company's top and emerging risks

The preliminary outcome of the CRA was reported to and discussed with the Audit Committee of the Supervisory Board in the meeting of 6 December 2016. This 'top-down' outcome corresponded very well with the 'bottom-up' risks and incidents as reported by all the individual units in their LoR, as well as with the findings from the internal and external audits. This final risk profile was reported to and discussed with the Audit Committee on 13 February 2017 and forms the basis for the main risks and responses as reported on the next page.

Top risks

The table on the next page shows the four most important risks to DSM not achieving its targets as defined in Strategy 2018: *Driving Profitable Growth* as well as the remedial actions to mitigate them. Top risks have a potential impact on DSM's EBITDA of approximately €30 million and over.

The top risks as defined in 2016 relate to the same topics as those identified in 2015. Besides a further sharpening of the definitions used to reflect both internal and external developments during the year, the main changes versus 2015 are:

- 'Geopolitical, global financial and economic developments' have become the number two top risk for our company (2015: number three) as geopolitical risks have increased, while at the same time oil prices have become very uncertain and more volatile.
- 'People, organization and culture' dropped to the number three position as a result of the implementation of the new talent management model, as well as the on-going roll-out of the new target operating model for the company.

Other important risks

Besides the top strategic risks reported on the right, the CRA has identified a number of other important (sometimes more operational) risks with a potential EBITDA impact of approximately €5 million and over; these include business continuity, product liability, cyber security, ICT complexity, intellectual property and raw material prices. Some of these risks, such as tax risks, are managed at corporate level, while others are managed at unit level through rigorous application of the DSM risk management cycle and its risk management practices as explained above. Some risks with the potential to emerge in the mid- and longer-term have been identified and discussed by the Managing Board and are reported in the following paragraph. The company's risk management and internal control system has been designed to monitor and respond to these developments in a timely manner, however complete prevention or mitigation can never be achieved. A combined corporate and unit effort is ongoing to reduce potential ICT, cyber security and internal control-related risks.

Emerging & mid-term risks

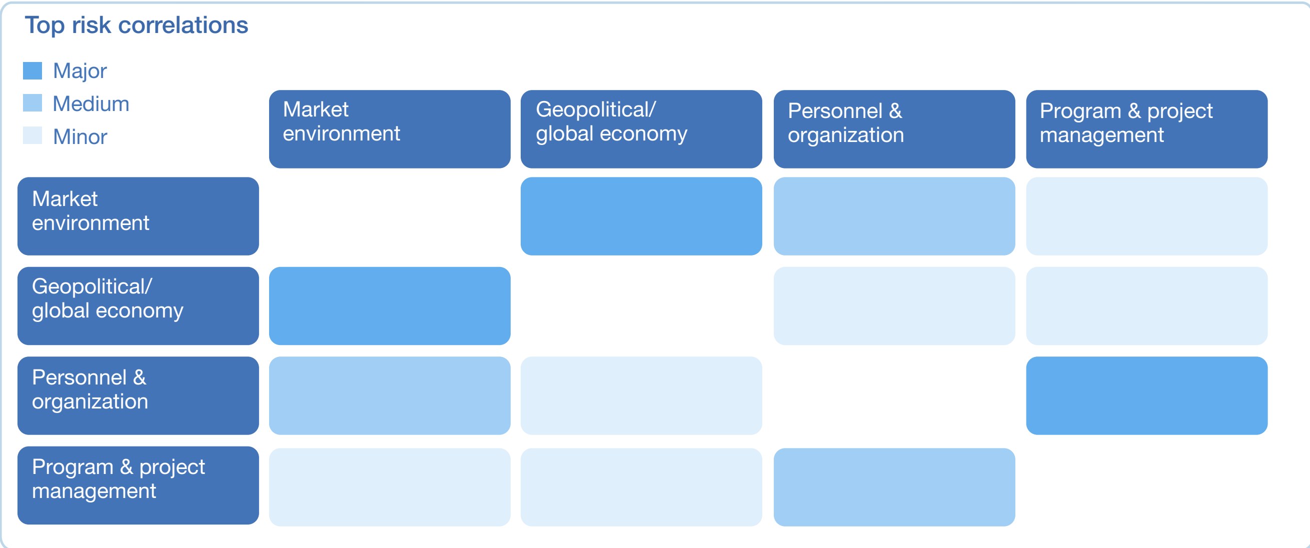
The following three emerging and mid-term risks have been reported by the Managing Board (the first two of which were identified in 2015, with the third a new addition following the 2016 CRA) and are being carefully monitored so as to be able to mitigate them or use them as new opportunities in a timely manner:

- Slower development pace of some longer-term DSM Innovation projects such as Clean Cow, new natural sweeteners, etc. To secure these key projects as early as possible, DSM must ensure strict project governance, staffing, and adequate R&D and innovation budgets, as well as customer alliances.
- DSM's Nutrition and Materials markets may be disrupted by longer-term changes in food preferences/food systems, such as the potential impact of climate change and health trends on animal protein consumption, and/or by innovations such as 3D printing, new systems replacing fossil fuels by energy from renewable sources, new mobility and transport options, and the circular and sharing economy. At the same time, these changes might also offer new opportunities in the value chains DSM serves.
- New: DSM may not be able to develop new business models fast enough to take advantage of digital transformation trends in all its market segments.

Top risks and related mitigating actions

Description of risks	Mitigating actions
Market environment	
In 2015, DSM finalized key transformation steps, completing the creation of a streamlined and simplified business portfolio and a good platform for growth, as 2016's results have shown. Nonetheless the risk of facing increased competition for some product-market combinations remains, while DSM actively needs to manage capacity expansions for selected products.	DSM leverages its innovation power to differentiate in the value chain and secure growth. Furthermore, DSM is broadening its offering in terms of products, applications and customer base. Improved marketing and sales management programs should contribute to enabling DSM to increase/protect the value it captures, while the company plans timely capacity expansions and/or external sourcing to manage growth. This is strictly monitored by the Executive Committee.
Geopolitical, global financial and economic developments	
DSM's Strategy 2018 assumed no major economic downturn with a global GDP growth-rate of 3.2%, although economic headwinds might occur. Events such as major changes in the political landscape and/or an increase in oil price (volatility) may impact the Materials business in particular. DSM assumed exchange rates versus the euro of approximately USD 1.10 and CHF 1.08, while future currency volatilities could have a significant impact on the achievement of DSM's targets.	The same mitigating actions apply to macro-economic developments as for risks related to the market environment. Furthermore, DSM continues to match cost and revenue currencies wherever possible, while the transactional exchange rate risk has been reduced by, among other things, the continued development of DSM's acquired businesses in China and Latin America, which provide a measure of natural hedge with 'local for local' production. Improved scenario planning is being developed to secure continued delivery in line with targets even should the oil price deviate significantly from original assumptions.
People, organization and culture	
DSM has significantly altered its organizational structure and operating model, potentially temporarily affecting DSM's capabilities in certain disciplines. The way DSM manages talent may also not be fully at the desired level to execute its plans for above-market growth or its cost and productivity improvement programs.	DSM is adjusting its operating model and has strengthened its top leadership structure precisely to manage performance and drive the achievement of its objectives. A culture change program is on-going focused on a results-driven trust/support/can-do mindset. Moreover, DSM will speed up/be more progressive in rolling out its talent management approach. DSM will improve its existing capabilities by training and attracting additional competences if required.
Program and project management	
Besides achieving above-market growth in the period 2016-2018, EBITDA improvements have to be generated via cost savings to be derived from globally leveraging DSM's support functions and a Nutrition-specific cost and productivity improvement program. Although DSM's well-identified initiatives with targeted overall savings of € 250-300 million in Adjusted EBITDA by the end of 2018 (versus the 2014 baseline) are on track at the end of 2016, the final delivery of the programs will continue to require strong program and project management.	DSM's new way of working with its focus on Accountability (delivering the results) and Collaboration (increased speed) in combination with a new operating model and a new, strengthened, top structure should enable faster and better execution of the strategic cost and productivity improvement programs. Moreover, DSM continues to invest in change management and ongoing monitoring, which includes taking corrective actions where needed. So far these major programs are well on track.

Risk correlation
In terms of possible risk correlations, the potential geopolitical and economic headwinds mentioned in the top risk 'Geopolitical, global financial and economic developments' might also impact the top risk of 'Market environment'; a domino or compounding effect could occur. This kind of potential risk correlation is visualized for the top four risks in the chart below. Correlated risks could either strengthen or partly mitigate one another.



Broadly the same mitigating actions apply for these potentially correlated top risks. As a further mitigating action, DSM is strengthening its commercial capabilities as well as its innovation and sourcing strategies to secure insofar as possible the top-line growth and margins it targets.

Enhancement of the risk management system

A number of improvements to the risk management system were developed and implemented during the year, some of which have been mentioned above. The key improvements were:

- Compliance: DSM further strengthened the implementation score of the nine values-related trainings (which now include Privacy) to an average of above 95%. A program to improve the effectiveness and execution of the DSM Corporate requirements and related internal controls by simplifying them is underway. Improved learning from incidents and better operational end-to-end risk management are on the agenda for 2017 and onward.
- Risk assessments: improvements include updating and extending the list of risk definitions, while additional Executive Committee attention to the topic clearly strengthened the tracking of actions from the CRA. Potential risk correlations were also discussed to prevent – insofar as possible – situations with a potential 'compounding effect' of risks. Nonetheless, there is more work required to further enhance the quality of the risk assessments in terms of preparation, facilitation, challenging and defining mitigating actions.
- Risk solutions: an updated risk management training program was delivered to DSM's largest regions. The inclusion of more outside-in views and the sharing of internal and external best practices contributed to risk management maturity.
- The Audit Committee of the Supervisory Board was given in-depth insight into the 2016 improvements to the DSM risk management system, including those areas recognized externally as best in class, as well as the areas for future efforts as mentioned above. This ensured that they remained fully involved and aware of the developments in enterprise risk management and how these risk management improvements (could) contribute to the achievement of DSM's strategic objectives.

Statements of the Managing Board

On the basis of the above and in accordance with best practice II.1.5 of the Dutch corporate governance code of December 2008, and Article 5:25c of the Financial Markets Supervision Act, the Managing Board confirms that internal controls over financial reporting provide a reasonable level of assurance that the financial reporting does not contain any material inaccuracies, and confirms that these controls functioned properly in the year under review and that there are no indications that they will not continue to do so. The financial statements fairly represent the company's financial condition and the results of the company's operations, and provide the required disclosures.

It should be noted that the above does not imply that these systems and procedures provide absolute assurance as to the realization of operational and strategic business objectives, or that they can prevent all misstatements, inaccuracies, errors, fraud and non-compliances with legislation, rules and regulations.

In view of all of the above, the Managing Board confirms that, to the best of its knowledge, the financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the company, and the management report includes a fair review of the position at the balance sheet date and the development and performance of the business during the financial year, together with a description of the principal risks and uncertainties that the company faces.

Heerlen, 2 March 2017

The Managing Board

Feike Sijbesma, CEO/Chairman Managing Board
Geraldine Matchett, CFO
Dimitri de Vreeze

Report by the Supervisory Board

" My colleagues and I were keen to assess how well our company is using Strategy 2018 to drive the profitable growth for which we are so well positioned. It was pleasing to see the clear focus on delivery throughout the organization."

Rob Routs, Chairman Supervisory Board

The past year brought our company an important step closer to its growth aspirations. Going into 2016, my colleagues and I on the Supervisory Board were keen to assess how well DSM is using Strategy 2018 to drive the profitable growth for which our company is so well positioned. We were pleased by the clear sense of direction that we witnessed on all sides, and by the strong focus on delivery throughout the organization.

During the year, the Supervisory Board dedicated two working sessions to assessing the execution of Strategy 2018. We were gratified to see that DSM as a whole is really in 'delivery' mode. The improvement programs are firmly on track and the business is growing. At the same time, the investments in talent development – the third key aim of Strategy 2018 alongside Adjusted EBITDA and ROCE growth – are bearing fruit.

A highlight of 2016 was our site visit to DSM Nutritional Products in Switzerland and Germany. This was an informative and also a very energizing trip. It gave the Supervisory Board a welcome chance to deepen our understanding of the various global industrial sectors that this business group serves. More than this, it provided valuable insights into DSM Nutritional Products' growth opportunities, innovation platforms and philosophy of continuous improvement. We also very much welcomed the opportunity to meet some of our managers and employees in Switzerland and Germany, whose enthusiasm and commitment were inspirational.

Besides growth, we are also raising our sustainability aspirations as part of Strategy 2018. The Supervisory Board is very proud of our company's achievements in this field in 2016. In the light of the substantial role he played in supporting the COP21 agreement, Feike Sijbesma was invited to co-chair the Carbon Pricing Leadership Coalition together with Minister Ségolène Royal of France – a great honor, and thoroughly deserved. Our CEO and Chairman also received a so-called 'duurzaam lintje' in the Netherlands, a decoration that recognizes his personal commitment to sustainability, which is our company's core value.

Likewise very impressive was the professionalism with which DSM as a whole tackled the necessary improvement programs during 2016, which affected many of our colleagues. The year 2016 was a demanding one in many ways, but one in which we took a big step toward achieving our ambitions. On behalf of my colleagues on the Supervisory Board, I would like to thank our employees and Executive Committee for all their hard work and commitment in the past year, as well as thanking all the other stakeholders who continue to place their trust in our company. All in all, 2016 was a good year for DSM and we are on track for an even brighter future.

This Report provides further information on the way the Supervisory Board performed its duties in 2016. These concern supervising the policy pursued by the Managing Board, the Managing Board's performance of its managerial duties and the general course of affairs within DSM and its businesses, as well as in assisting the Managing Board with advice, either upon request or proactively. Finally, these duties also include assessing the Managing Board's performance and ensuring that their remuneration is both in line with that performance and provides the appropriate incentives.

Composition of the Supervisory Board

The composition of the DSM Supervisory Board is diverse in gender (four men, three women), nationality (three Dutch, one Swiss, two American and one Singaporean), background, knowledge and experience. The Board's current members are Rob Routs (Chair), Tom de Swaan (Deputy Chair), Victoria Haynes, Pierre Hochuli, Eileen Kennedy, Pauline van der Meer Mohr, and Pradeep Pant. For detailed information on their background, see 'Corporate Governance' on the company website and page 120 of this Report.

The targeted profile of the Supervisory Board is reflected in its regulations, which are published on the company website under 'Corporate Governance'. The Supervisory Board has four committees to cover key areas in greater detail: auditing, nominations (of the Supervisory Board and Managing Board), remuneration (of the Supervisory Board and Managing Board) and sustainability. Information on these committees is given elsewhere in this chapter. The charters of the committees are published on the company website under 'Corporate Governance'.

Information

The Managing Board is the most important source of information for the Supervisory Board. Information is mainly submitted for Supervisory Board meetings but also provided around those meetings and in bilateral contacts between Supervisory Board and Managing Board members. At the start of each Supervisory Board meeting, the Managing Board shares news as well as highlights and lowlights since the previous meeting. This not only keeps the Supervisory Board informed, but also enables them to indicate any topics on which they would like to receive more information or have a discussion. Whenever the Supervisory Board as a whole or an individual member feels the need to be informed on a specific topic, this is requested; follow-up is provided by the Managing Board. In 2016, for example, following a continuous education session on cyber security, the Supervisory Board asked for an update of DSM's IT strategy and on how DSM was viewing, grasping and, where applicable, pursuing opportunities and mitigating risks following developments in the digital arena.

The Supervisory Board furthermore regularly receives information on relevant topics from senior leaders and experts within DSM during committee meetings, full Supervisory Board meetings, annual site visits, and as part of their ongoing professional education. In 2016, this was the case with respect to the revision of the Dutch corporate governance code; economic and political developments in Latin America; the progress of the POET-DSM joint venture; talent development; and IT and cyber security. During its annual site visit, the Supervisory Board has and actively takes the opportunity to interact with employees at different levels within the company, from the shop-, lab- and work-floor to senior leadership, thus collecting information from different sources within DSM.

Relationship and stakeholder management

In performing its duties, the Supervisory Board acts in accordance with the interests of the company and the business connected with it, taking into consideration the interests of the company's stakeholders. The Chairman of the Supervisory Board is in close contact with the CEO/Chairman of the Managing Board, as is the Chairman of the Audit Committee with the CFO. The Supervisory Board interacts with DSM employees on various occasions and in various settings. In general, bilateral contacts between Supervisory Board members and Managing Board members follow naturally from topics discussed in the Supervisory Board meetings and match the respective fields of expertise. In view of that expertise, Managing Board members also seek the advice of Supervisory Board members on specific matters. The same goes for bilateral contacts with other employees. Examples are a visit by the Chairman of the Supervisory Board to the POET-DSM plant in Emmetsburg (Iowa, USA) to gain a better understanding of the pretreatment issues at the plant and contribute his experience to solving these. Another member of the Supervisory Board met with DSM's Senior Vice President Group Taxation to obtain a more in-depth understanding of DSM's taxation policy. The members of the Sustainability Committee held an informal meeting to discuss how to get the most out of the Sustainability Committee meetings, as a result of which the concept of deep dives into specific topics was introduced. Our new member Pradeep Pant had numerous bilateral meetings and visited several sites as part of his introduction program. The Chairman of the Supervisory Board also met a group of senior DSM managers taking part in DSM's executive leadership program to share his views on leadership with them. The Supervisory Board is informed of the position of other DSM stakeholders by the Managing Board. In addition, the Supervisory Board collects such information through its own network. The Supervisory Board has an active interest in maintaining a good understanding of shareholders' perceptions.

Supervision and advice

The Supervisory Board performs its duties of supervising and advising the Managing Board both with respect to recurring standard agenda items for Supervisory Board meetings as well as to specific topics that become relevant at a given point in time.

The most prominent regular agenda item is an update on business, financials and treasury topics. As part of this agenda item, the Supervisory Board tracks the financial performance of the company, approves the annual Finance Plan and deliberates on any additional treasury topics as applicable. The Supervisory Board thus discussed and approved the share buy-back program to cover the company's commitments under existing management and employee option plans and to implement its stock dividend policy; the issue of bonds; and the hedging policy. Furthermore, the treatment of DSM’s cumulative preference shares A was discussed several times with the Supervisory Board.

In 2015, the Supervisory Board’s involvement in the development of Strategy 2018 went beyond supervision and approval. Part of the Supervisory Board meetings were used by the Managing Board for working sessions to ensure that the Supervisory Board’s expertise could be utilized to the full. In the spirit of these working sessions and in order for the Supervisory Board to track the execution of Strategy 2018, working sessions were again organized in 2016, one focusing on materials, and another on health and nutrition. During these sessions, the Supervisory Board was provided with a performance update as well as a growth outlook for the respective businesses. Break-out group discussions subsequently focused on whether enough was being done to execute the current strategy and the extent to which all relevant trends had been identified, either in terms of risks or opportunities. The Supervisory Board started the year assessing past acquisitions, investments and divestments to identify lessons learned going forward.

Site visit to DSM Nutritional Products (Switzerland and Germany)

Each year the Supervisory Board takes a number of days to visit DSM sites in a particular region. This year’s visit was fully dedicated to DSM Nutritional Products. The site visits offer an opportunity to interact with employees across the company as well as providing the Supervisory Board members with continuing education opportunities. The visit deepened the Supervisory Board’s understanding of DSM’s Nutrition activities, with the Board members gaining additional insights into the technologies used, DSM’s positioning in the value chains, and the business models applied.

The site visit began with a general overview of DSM’s largest business group, its organizational principles, people and financials. DSM Nutritional Products combines global production capabilities with customized local formulations. The site visit was designed in such a way that the Supervisory Board followed the manufacturing chain, starting with the manufacturing of base products, which was witnessed at the Lalden (Switzerland) site. These products are subsequently used to produce DSM’s final products in Animal Nutrition & Health, Human Nutrition & Health and Personal Care & Aroma Ingredients at locations around the world. Moving along the value chain, the Supervisory Board also visited the site in Grenzach (Germany), which produces vitamins B1, B2 and D3. Presentations on the different business units as well as on DSM’s current nutritional products innovation platforms completed the visit. Given the importance the Supervisory Board always attaches to customer intimacy and understanding, the program included a visit to the Nestlé Research Centre in Lausanne (Switzerland), Nestlé being one of DSM Nutritional Product’s major customers.

Town hall meeting with the DSM Supervisory Board in Switzerland

During the site visit, time was also spent to enable employees and the Supervisory Board to get to know each other. For the first time, the Supervisory Board held a 'town hall' meeting with employees, which met with overwhelmingly positive feedback. An evening was spent with local executives discussing the execution of the strategy, culture and talent development, and the future of Nutrition. Finally, time was taken for reflection meetings in which the Supervisory Board shared its impressions with the Executive Committee members who participated. During these meetings, the Supervisory Board members shared any specific advice they had pertaining to the business models applied and technologies used, as well as to talent development.

Supervisory Board meetings and performance evaluation

In 2016, the Supervisory Board had six meetings in the presence of the Managing Board. On two occasions, a member was excused on health grounds and on two other occasions a member was excused due to conflicting commitments. The Supervisory Board held one additional conference call to assess the subsequent event procedure performed between the publication of DSM's full year results 2015 and the publication of its 2015 financial statements.

The Supervisory Board also convenes in the absence of the Managing Board, which happens either before or after each meeting.

A Supervisory Board evaluation is performed once every three years by an external advisor; this was again the case in 2016. The evaluation was carried out on the basis of a short written questionnaire, followed by more in-depth one-on-one interviews between the external advisor and individual Supervisory Board members. In completing his assessment, the external advisor also interviewed the members of the Managing Board, the Executive Vice President Group People & Organization, and DSM's Company Secretary. As part of the evaluation, the collective performance of the Board and its Committees and the performance of the Chairman were assessed.

The overall feedback from the evaluation is that the Board has made good progress in its development as a team: it has a balanced composition and works well together in a very open atmosphere, also in the discussions with the Managing Board. Interactions are both supportive and respectful as well as challenging; there is a constructive and collegial meeting culture. The advice going forward was to maintain or perhaps even increase the amount of time spent on strategy, including insights into DSM's competitive environment, customer focus, developments in the markets in which DSM operates, and the impact of digitization. This outcome was presented to and discussed with the Supervisory Board in December, in the absence of the Managing Board.

The Board established that all of its members are committed to allocating sufficient time and attention to the Board's duties of supervising and advising the Managing Board. Given some of the conflicting commitments that arose during the year, it was agreed to come to an additional planning effort to avoid such conflicts in the future.

Committees

The Supervisory Board has four committees to cover key areas in greater detail: nominations, remuneration, sustainability and auditing, which are described in more detail below.

Board nominations

Members of the Nomination Committee are Rob Routs (Chair), Eileen Kennedy and Pauline van der Meer Mohr. Feike Sijbesma and Peter Vrijsen, Executive Vice President Group People & Organization, were also involved in the discussions of the Committee. The Committee met five times in 2016, once via conference call. The recommendations and minutes of all Nomination Committee meetings were shared with the entire Supervisory Board. This feedback included advice and recommendations regarding topics to be approved by the full Supervisory Board.

In 2016, nomination discussions were focused on succession planning for both the Managing Board and the Supervisory Board. With respect to the Managing Board, the discussions were focused on the talent pipeline available for succession of Managing Board members. The Nomination Committee also discussed the proposed nomination for reappointment of Dimitri de Vreeze, whose first term as Managing Board member will end in 2017. At the end of the year, discussions also covered the arrangements around the departure of Stephan Tanda. The responsibilities of Stephan Tanda have been re-arranged among the Managing Board and Executive Committee members.

The Supervisory Board assessed the composition of the Managing Board following Stephan Tanda's departure. It concluded that the Managing Board is still diverse in nationality (two Dutch and one member being a Swiss, British and French citizen), gender (two men, one woman), background, knowledge and experience, and provides a good foundation to support all clusters and business groups in achieving their targets and thus contributing to the company strategy aimed at driving profitable growth. For detailed background information on all Managing Board members, see the company website under 'Corporate Governance' and page 120 of this Report.

Taking into account the Supervisory Board profile as laid down in the Supervisory Board regulations, the Nomination Committee continued discussions on the overall composition of the Supervisory Board and discussed the succession planning for the Supervisory Board. Both Pierre Hochuli and Tom de Swaan are approaching the maximum tenure as members of the Supervisory Board (as per the 2017 and 2018 Annual General Meetings of Shareholders respectively). The Nomination Committee consequently spent a reasonable amount of time on the profiles of new Supervisory Board members to be attracted in the coming years, and searches for new Board members were initiated in the year.

Board remuneration

The Remuneration Committee had five meetings and two conference calls in 2016. Pauline van der Meer Mohr (Chair), Victoria Haynes, Rob Routs and Tom de Swaan are members of this committee. Recommendations and minutes of the Remuneration Committee meetings were shared with the full Supervisory Board and used to determine the final remuneration of the members of the Managing Board.

Discussions were focused on the performance and the related remuneration of the members of the Managing Board, both in respect of company and individual performance in 2016, as well as the way the current remuneration policy should be applied given the targets set as part of Strategy 2018: *Driving Profitable Growth*. Feike Sijbesma and Peter Vrijsen were also partly involved in these discussions.

Sustainability

The Sustainability Committee prepares the Supervisory Board's discussions on sustainability topics. The Sustainability Committee met three times in 2016. One member had to excuse himself once for health reasons. The members of this Committee are Eileen Kennedy (Chair), Pierre Hochuli and Pradeep Pant. The Chair of the Supervisory Board has a standing invitation and participated in all meetings. The recommendations and minutes of these meetings were shared and discussed with the entire Supervisory Board during its meetings with the Managing Board. This feedback included advice and recommendations regarding topics to be approved by the full Supervisory Board, in particular the sustainability reporting in this Report. With the 'Independent assurance report on the sustainability information' by KPMG on page 211 of this Report taken into consideration, the full Supervisory Board approved the reporting in these sections in its meeting of 2 March 2017. The Sustainability Information is in compliance with the Standards of the Global Reporting Initiative and the internal reporting criteria of DSM, which are included in this Report, and is also aligned with the International Integrated Reporting Council <IR> Framework where possible.

During the year, a recurring topic has been DSM's performance on its People and Planet aspirations with a focus on Brighter Living Solutions, Responsible Care and Inclusion & Diversity. Through these discussions, the Sustainability Committee followed up on the progress made with the implementation of the sustainability and safety aspirations set by the company as part of its Strategy 2018. Deep dives were made into Planet (DSM's road to reducing greenhouse-gas emissions) and People (DSM's Personal Care product Alpaflor® Edelweiss was discussed as an example of the People+ assessment for Brighter Living Solutions). The Committee was also briefed on the newly introduced Product Category Sustainability Report, which identifies environmental and social impact differentiators for each of DSM's product categories and confirms minimum compliance levels. Furthermore the Committee was updated on DSM's performance in the Dow Jones Sustainability World Index (DJSI). The Committee's view that DSM is doing well when it comes to sustainability is supported by the fact that in 2016 DSM was named the leader in its industry in the DJSI and has thereby maintained its position in the so-called Gold Class.

Financials and auditing

The activities of the Supervisory Board in the area of financials and auditing are prepared by the Audit Committee. The Audit Committee met six times in 2016, of which three times via conference call. Tom de Swaan (Chair), Victoria Haynes, Pierre Hochuli and Pradeep Pant are members of the Audit Committee. All Supervisory Board members have a standing invitation to attend Audit Committee meetings; they do so most often for the regular conference calls in which financial developments and interim results are discussed. The Chair of the Supervisory Board participated in all meetings and calls. Whenever relevant, managers responsible for corporate control, internal audit, risk management, and operational audit and compliance were invited to explain developments in their areas to the Audit Committee. DSM's external auditor KPMG, the CFO and occasionally the CEO also participated in the Audit Committee's meetings and calls. At least once a year, the Audit Committee meets with the external auditor without the Managing Board being present. Two such meetings took place in 2016. The highlights and the minutes of all Audit Committee meetings were shared with the full Supervisory Board. This feedback included advice and recommendations regarding topics to be approved by the full Supervisory Board.

The Committee had in-depth discussions on the company's financials; financing and guarantee plan; capital expenditure plan; dividend proposals; financial statements; accounting policy changes; internal risk management and control systems; potential risks (including Safety, Health and Environment (SHE) and security risks); compliance with recommendations and observations made by internal and external auditors, and on the role and functioning of the Operational Audit department, including the endorsement of its proposed audit plan. As part of the Corporate Risk Assessment, the company's main risks and their mitigation were discussed. The Committee also discussed and evaluated cases submitted under DSM's whistleblower policy (DSM Alert), and mitigating actions to prevent recurrence. Discussions were held with KPMG about the Management Letter and financial statements for 2016. As part of the planning process, key audit matters dealing with, among other topics, impairment triggers, on-going litigation and the accounting of the results of ChemicaInvest were explained and shared with the Audit Committee.

Financial statements 2016

The Report by the Managing Board and the financial statements for 2016 were submitted by the Managing Board to the

Supervisory Board, in accordance with the provisions of Article 30 of the Articles of Association, and subsequently approved by the Supervisory Board on 2 March 2017. The financial statements were audited by KPMG, who issued an unqualified opinion (see the 'Independent auditor's report' on page 206). The Supervisory Board established that the external auditor was independent of DSM.

The Supervisory Board will submit the 2016 financial statements to the 2017 Annual General Meeting of Shareholders, and will propose that the shareholders adopt them and release the Managing Board from all liability in respect of its managerial activities and release the Supervisory Board from all liability in respect of its supervision of the Managing Board. The profit appropriation as proposed by the Managing Board and approved by the Supervisory Board is presented in the Profit section of the 2016 Integrated Annual Report.

Remuneration policy for the Managing Board

This chapter outlines the remuneration policy as approved by the Annual General Meeting of Shareholders. Details of the actual remuneration in 2016 as prepared by the Remuneration Committee and approved by the Supervisory Board can be found in Note 12 of the 'Parent company financial statements' on page 199.

Remuneration policy

The objective of DSM’s remuneration policy is to attract, reward, motivate, incentivize and retain qualified and expert individuals that the company needs in order to achieve its strategic and operational objectives, while acknowledging the societal context around remuneration and recognizing the interests of DSM's stakeholders. The following elements are taken into consideration:

- The remuneration policy reflects a balance between the interests of DSM’s main stakeholders as well as a balance between the company’s short-term and long-term strategy. As a result, the structure of the remuneration package for the Managing Board is designed to balance short-term operational performance with the medium- and long-term objective of creating sustainable value within the company, while taking into account the interests of its stakeholders. DSM strives for a high performance in the field of sustainability and aims to maintain a good balance between economic gain, respect for people and concern for the environment in line with the DSM values and business principles as reflected in the DSM Code of Business Conduct.
- To ensure that highly skilled and qualified senior executives can be attracted, motivated and retained, DSM aims for a total remuneration level that is comparable to levels provided by other (Dutch and European) multinational companies that are similar to DSM in terms of size and complexity.
- The remuneration policies for the members of the Managing Board and for other Executive Committee members as well as other senior executives of DSM are aligned.
- In designing and setting the levels of remuneration for the Managing Board, the Supervisory Board also takes into account the relevant statutory provisions and provisions of the Dutch corporate governance code, societal and market trends and the interests of stakeholders.
- DSM’s policy is to offer the Managing Board a total direct compensation approaching the median of the labor-market peer group.

No adjustments to the remuneration policy for the Managing Board in 2016

There were no adjustments to DSM’s remuneration policy in 2016. The policy was last adjusted in 2013.

The approved adjustments at that time did not change the overall remuneration model for the Managing Board. This model is based on providing fair compensation approaching the median, and consists of a base salary and a well-balanced mix of Short-Term and Long-Term Incentives. Both the Short-Term Incentive (STI) and the Long-Term Incentive (LTI) consist of two equal parts, one of which is linked to financial targets and the other to sustainability and in addition – for STI only – individual targets.

Labor-market peer group

In order to be able to recruit the right caliber of people for the Managing Board and to secure long-term retention of the current Board members, DSM takes external reference data into account in determining adequate remuneration levels. For this purpose, a specific labor-market peer group has been defined which consists of a number of Dutch and European companies that are more or less comparable to DSM in terms of size, international scope and complexity in business portfolio. The Supervisory Board regularly reviews the peer group to ensure that its composition is still appropriate.

The labor-market peer group for 2016 consisted of the following 16 companies (eight of which are peers on the Amsterdam stock exchange, the other eight being European industry peers):

AkzoNobel	KPN
ASML	LANXESS
Clariant	Lonza
Covestro	Philips (Health Tech)
Evonik	Randstad
Givaudan	Relx (Reed Elsevier)
Heineken	Solvay
Johnson Matthey	Wolters Kluwer

As part of its remuneration policy DSM will benchmark its remuneration package against the packages offered by the labor-market peer group once every three years, potentially leading to adjustments. In addition, the company may apply a yearly increase to the base salary based on the ‘general increase’ (market movement) for DSM executives in the Netherlands.

The remuneration policy was benchmarked against the peer group in Q4 2016. DSM aims to offer the Managing Board members a total direct compensation approaching the median of the labor-market peer group. The Supervisory Board of DSM has determined that the remuneration level of the CEO during the past years was clearly lower than the median of the pre-determined peer group (lowest quartile). This is due to the conservative approach of the CEO regarding his own remuneration. The remuneration of the other members of the Managing Board is at median level. The DSM remuneration policy is to pay the Managing Board at a level approaching the median of the peer group. For the CEO this resulted in a substantial gap in total rewards (base salary and related pension entitlement, STI and LTI) versus peers. In order not to increase the total remuneration gap further the Supervisory Board decided to grant a one-time amount allocated as a pension contribution.

Total Direct Compensation (TDC)

The total direct compensation of the Managing Board consists of the following components:

(I) Base salary
(II) Variable income
- Performance-related STI (Deferral and Share Matching Plan)
- Performance-related LTI (Restricted Share Plan)

In addition to this total direct compensation, the members of the Managing Board participate in the Dutch pension scheme for DSM employees in the Netherlands and are entitled to other benefits, such as a company car and representation allowance.

Value as percentage of Total Direct Compensation (on target):

A: Base salary	50%
B: Variable income (STI + LTI)[1]	50%
Total Direct Compensation (TDC)	100%

[1] LTI at discounted fair value

Base salary

On joining the Board, the Managing Board members receive a base salary that is comparable with the median of the labor-market peer group. Base salary levels are reviewed based on a three-year remuneration benchmark. In addition, the company will, when appropriate, apply a yearly increase to the base salary based on the 'general increase' (market movement) for DSM executives in the Netherlands, taking into account the general movements of the labor-market peer group as well. Adjustment of the base salary is at the discretion of the Supervisory Board.

Variable income

The variable income part of remuneration consists of the Short-Term and Long-Term Incentives. The distribution between Short-Term and Long-Term Incentives for (on target) performance aims to achieve a proper balance between short-term result and long-term value creation. The parameters relating to the various elements of the variable income part of the remuneration are established and where necessary adjusted by, and at the discretion of, the Supervisory Board, taking into account the general rules and principles of the remuneration policy itself.

Distribution of variable income (on target):

A: Short-Term Incentive (STI) (50% base salary)	50%
B: Long-Term Incentive (LTI) (50% base salary)[1]	50%
Total variable income as % of base salary	100%

[1] LTI at discounted fair value

Short-Term Incentive (STI)

Managing Board members are eligible to participate in an STI scheme. The scheme is designed to reward short-term operational performance with the long-term objective of creating sustainable value, taking into account the interests of all stakeholders.

The STI opportunity amounts to 50% of the annual base salary for on-target performance (100% in the case of excellent over-performance). Half of the STI opportunity (i.e. 25% of base salary at on-target performance) is related to financial targets, the other half to sustainability and individual targets.

Target areas	Total	Shared	Individual
Financial	25%	25%	0%
Sustainability and individual	25%	15%	10%
Total	50%	40%	10%

STI linked to financial targets

The part of the STI that is linked to shared financial targets (25% of base salary at on-target) consists of elements related to the company's focus on delivering the financial targets of its Strategy 2018: *Driving Profitable Growth*. These are: Adjusted EBITDA, which represents an opportunity at target performance of 12.5%; gross free cash flow, with an opportunity of 10%; and organic net sales growth, with a 2.5% opportunity.

Target areas	On-target pay-out (% of base salary)
Financial targets	
- Adjusted EBITDA	12.5
- Gross free cash flow	10.0
- Organic net sales growth[1]	2.5
Total	25.0

[1] Excluding currency fluctuations, acquisitions and divestments

STI linked to sustainability and individual targets

The part of the STI that is linked to non-financial targets (25% of base salary at on-target) relates to shared sustainability as well as to individual targets. Further refinement/adaptations of performance measures in the area of sustainability and their relative weight may take place following proper evaluation.

The following shared measures linked to sustainability are applicable for the STI:

- Brighter Living Solutions (BLS): percentage of running business that meets ECO+ and People+ criteria
- Employee Engagement Index: related to the High Performance Norm in industry
- Safety Performance: defined as Frequency Index for Recordable Injuries.

Definitions of these elements can be found in 'Brighter Living Solutions' on page 22 and 'People in 2016' on page 39.

In addition to shared sustainability targets (15%), a limited number of individual non-financial targets (10%) will apply.

Target areas	On-target pay-out (% of base salary)
Non-financial targets	
- Sustainability (3 targets with an equal weight of 5% each; BLS, Employee Engagement and Safety)	15
- Individual	10
Total	25

The targets are determined each year by the Supervisory Board, based on historical performance, the operational and strategic outlook of the company in the short term and expectations of the company's management and stakeholders, among other things. The targets contribute to the realization of the objective of long-term value creation.

The company does not disclose the actual targets, as they qualify as commercially sensitive information. However, full transparency will be given on target areas and definitions. The external auditors performed agreed-upon mandate procedures on target-setting and realization. For detailed information see Note 12 of the 'Parent company financial statements' on page 199.

Mandatory and voluntary deferral of STI

A mandatory (25%) and a voluntary proportion (up to a total maximum of 50% of the total gross STI) of the STI amount earned in a year is deferred into DSM shares with a three-year holding period. This is linked to a one-for-one matching award on the total deferred amount under the condition that predefined performance targets and measures are met at the end of the three-year vesting period. The performance measures are equivalent to the measures under the Long-Term Incentive Plan. The Deferral and Share Matching Plan thus provides an additional link between Managing Board remuneration and long-term sustainable value creation.

Long-Term Incentives (LTI)

The Managing Board members are eligible to receive performance-related shares. Under the performance share plan, shares will conditionally be granted to Managing Board members. Vesting of these shares is conditional on the achievement of certain predetermined performance targets at the end of a three-year period.

The following four performance measures are applicable in equal measure for the calculation of the vesting of LTI performance shares:

- Relative Total Shareholder Return (TSR) performance versus a peer group
- Return on Capital Employed (ROCE) growth
- Energy Efficiency Improvement (EEI)
- Greenhouse-gas Emissions (GHGE) Efficiency Improvement.

The LTI performance targets can be defined as follows:

- **Relative Total Shareholder Return (TSR)**
  This is used to compare the performance of different companies' stocks and shares over time. It combines share price appreciation and dividends paid to show the total return to shareholders. The relative TSR position reflects the market perception of overall performance relative to a reference group.
- **Return on Capital Employed (ROCE) growth**
  This is the operating profit as a percentage of weighted average capital employed. In line with DSM's updated strategic targets, as of 2016 the LTI target on ROCE relates to ROCE growth as opposed to the absolute ROCE percentage used up until the end of the 2015 performance period.

- **Energy Efficiency Improvement (EEI)**
  This is the reduction of the amount of energy that is used per unit of product (known as energy efficiency) on a three-year rolling average basis.
  Greenhouse-gas Emissions (GHGE) Efficiency Improvement
  This is the reduction of the amount of greenhouse-gas emissions per unit of product. The definition of greenhouse gases (GHG) according to the Kyoto Protocol includes carbon dioxide (CO_2), methane, nitrous oxide (N_2O), sulfur hexafluoride, hydrofluorocarbons and perfluorocarbons. The scope for calculation of GHGE reduction is as follows:
  (I) DSM's direct emissions (on-site or from DSM assets) mainly comprise CO_2 (scope 1).
  (II) DSM's indirect emissions (emissions created on behalf of DSM in the generation of electricity or the delivery of energy via hot water or steam) relate to electricity from the grid. DSM relies on local suppliers (scope 2).

In determining the number of shares to be conditionally granted, the Supervisory Board takes into account the face value of the DSM share instead of the discounted fair value. This is in line with best practice and provides total transparency to shareholders. The policy for the value of the LTI is set at 100% of base salary when on target and 150% in the case of excellent performance (face value). The number of conditionally granted shares is set by dividing the policy level at maximum (150% of base salary) by a share price at the beginning of the year of the conditional grant. The annual grant level will fluctuate as a consequence of this mechanism.

Granting date
The grant date of the conditional performance shares will be the last trading day of March.

TSR as a performance measure
TSR counts for the vesting of 25% of the performance shares. DSM's TSR performance is compared to the average TSR performance of a set of predefined peer companies.

The TSR peer group for the 2016 performance period consists of the following 14 companies:

AkzoNobel	Evonik
Arkema	Givaudan
BASF	Kerry
Christian Hansen	LANXESS
Clariant	Lonza Group
Croda International	Novozymes
Dupont	Solvay

The TSR peer group reflects the relevant market in which DSM competes for shareholder preference. It includes sector-specific competitors that the Supervisory Board considers to be suitable benchmarks for DSM.

The peer group is verified and updated by the Supervisory Board each year based on market circumstances (such as mergers and acquisitions) that determine the appropriateness of the composition of the performance peer group.

ROCE growth as a performance measure
ROCE growth counts for the vesting of 25% of the performance shares.

EEI as a performance measure
EEI counts for the vesting of 25% of the performance shares.

GHGE Efficiency Improvement as a performance measure
GHGE Efficiency Improvement in percentage points (over a three-year period) is used as a basis for the vesting of 25% of the performance shares.

Performance incentive zones
The following vesting scheme has been established to reflect DSM's sharpened, challenging targets for the strategy period 2016-2018:

TSR vesting scheme		GHGE vesting scheme	
	% of shares that vest	DSM GHGE reduction over volume-related revenue in % points (3-year average improvement)	% of shares that vest
1	100	≥ 8.25	100
2	97	7.75 - < 8.25	83
3	93	7.25 - < 7.75	67
4	87	6.75 - < 7.25	50
5	80	6.25 - < 6.75	33
6	73	5.75 - < 6.25	17
7	67	< 5.75	0
8	50		
9	33		
10-15	0		

ROCE and EEI targets and vesting schemes are not being disclosed given their business-sensitive nature.

Up to and including the 2014 grant (i.e. shares vesting up to and including 2017 depending on the fulfilment of performance criteria), the vesting scheme for the part of the grant related to GHGE performance was based on DSM's reduction of GHGE over volume-related revenue as set out in the tables in the DSM Integrated Annual Report over 2013 and 2014.

The retention period for performance shares expires five years after the three-year vesting period or at termination of employment if this occurs earlier. The final TSR performance of DSM versus its peers will be determined and validated by a bank and agreed-upon mandate procedures are performed by the external auditor at the end of the vesting period.

Pensions

The members of the Managing Board participate in the Dutch pension fund *Stichting Pensioenfonds DSM Nederland* (PDN). This pension scheme for the Managing Board is equal to the pension scheme for the employees of DSM Executive Services B.V. and DSM employees in the Netherlands. The Supervisory Board decided to grant a contribution to the pension of the CEO, also in view of the fact that the CEO's total compensation is clearly below targeted policy level as mentioned on page 114.

Contractual arrangements

Term of employment

Managing Board members who joined DSM prior to 1 January 2013 are engaged on the basis of an individual employment agreement for an indefinite period of time. Managing Board members joining the company after 1 January 2013 are engaged on the basis of a Management Services Agreement with a four-year term, to be renewed at reappointment.

Term of appointment

Members of the Managing Board appointed before 1 January 2005 are appointed for an indefinite period of time. Managing Board members appointed after 1 January 2005 are appointed for a period of four years, after which they are eligible for reappointment by the Annual General Meeting of Shareholders.

Notice period

Resignation by a member of the Managing Board is subject to three months' notice (six months in case of a Management Services Agreement). A notice period of six months applies in the event of termination by the company.

Severance arrangement

There are no specific contractual exit arrangements for members of the Managing Board appointed before 1 January 2005. Should a situation arise in which a severance payment is appropriate for such a Board member, the Remuneration Committee will recommend the terms and conditions. The Supervisory Board will decide upon this, taking into account usual practices for these types of situations, as well as applicable laws and corporate governance requirements.

Members of the Managing Board appointed after 1 January 2005 are covered by a severance provision in accordance with the Dutch corporate governance code, which is set at a maximum of one annual base salary.

Claw-back / change-of-control

Legislation entered into force regarding the revision and claw-back of bonuses and profit-sharing arrangements of board members of Dutch listed companies as of January 2014. Part of this legislation was already covered in comparable rules of the Dutch corporate governance code and consequently already included in the employment contracts of the members of the Managing Board. This regards in particular the possibility (1) to revise an incentive prior to payment, if unaltered payment of the bonus/incentive would be unreasonable and unfair, and (2) to claw back an incentive, if payment took place on the basis of incorrect information on the fulfilment of the incentive targets or the conditions for payment of the incentive. In addition, it is enacted that in the case of a change-of-control event, a related increase in value of the securities that have been granted to a board member as part of his/her remuneration will be deducted from the remuneration to be paid to the board member at the time of selling these securities or when his/her board membership ends.

Share ownership

The Supervisory Board encourages the Managing Board to hold shares in the company to emphasize its confidence in the strategy and performance of the company.

Minimum shareholding guidelines for the members of the Managing Board are applicable, equivalent to three times the base salary in the case of the CEO and one time the base salary for the other Managing Board members. These shareholdings can be built up over five years. For more information, see the position paper 'Royal DSM's position on Board Member shareholdings in the company' on the company website.

Loans

DSM does not provide any loans to members of the Managing Board.

Scenario analysis

The Dutch corporate governance code requires that the Supervisory Board 'shall analyze possible outcomes of the variable income components and the effect on Managing Board remuneration'. Within DSM this analysis is conducted at least every three years.

Heerlen, 2 March 2017

The Supervisory Board
Rob Routs, Chairman
Tom de Swaan, Deputy Chairman
Victoria Haynes
Pierre Hochuli
Eileen Kennedy
Pauline van der Meer Mohr
Pradeep Pant

Supervisory Board and Managing Board Royal DSM

Supervisory Board

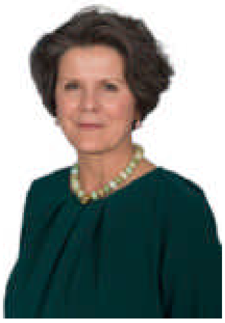
Rob Routs (1946, m), Chairman
First appointed: 2010. End of current term: 2018. Nationality: Dutch. Nomination Committee (Chairman), Remuneration Committee (member). Last executive position held: Executive Director Downstream and member of the Board of Royal Dutch Shell plc. Supervisory directorships/other positions: Chairman Supervisory Board of Aegon N.V.; member Board of Directors of AECOM; ATCO Group Ltd. and A.P. Moeller-Maersk Group.

Tom de Swaan (1946, m), Deputy Chairman
First appointed: 2006. End of current term: 2018. Nationality: Dutch. Audit Committee (Chairman), Remuneration Committee (member). Last executive position held: member Managing Board and CFO/CRO ABN AMRO. Supervisory directorships/other positions: Chairman Zurich Insurance Group; Chairman Board of Trustees of Netherlands Cancer Institute-Antoni van Leeuwenhoek Hospital; Chairman of the Board of Trustees of The Van Leer Jerusalem Institute; member of the IIF Board of Directors, member of the European Financial Services Round Table and member of the advisory board of China Banking Regulatory Commission in Beijing.

Victoria Haynes (1947, f)
First appointed: 2012. End of current term: 2020. Nationality: American. Audit Committee (member), Remuneration Committee (member). Last executive position held: President and CEO Research Triangle Institute International. Supervisory directorships/other positions: member Board of Directors of PPG and Nucor.

Pierre Hochuli (1947, m)
First appointed: 2005. End of current term: 2017. Nationality: Swiss. Audit Committee (member), Sustainability Committee (member). Last executive position held: Chairman Board of Directors of Devgen N.V. Supervisory directorships/other positions: none.

Eileen Kennedy (1947, f)
First appointed: 2012. End of current term: 2020. Nationality: American. Sustainability Committee (Chair), Nomination Committee (member). Position: Professor Nutrition Friedman School of Nutrition Science and Policy at Tufts University in Boston (USA); Supervisory directorships/other positions: High Level Panel of Experts on Food Security and Nutrition of the UN Committee on World Food Security.



Pauline van der Meer Mohr (1960, f)
First appointed: 2011. End of current term: 2019. Nationality: Dutch. Remuneration Committee (Chair), Nomination Committee (member). Last executive position held: President Executive Board of Erasmus University Rotterdam. Supervisory directorships/other positions: independent non-executive Director HSBC; member Supervisory Board of ASML N.V.; Chair Supervisory Board of EY Netherlands; director Hollandsche Maatschappij van Wetenschappen; member Board Concertgebouw Fonds; Chair Supervisory Board Nederlands Danstheater.

Pradeep Pant (1953, m)
First appointed: 2016. End of current term: 2020. Nationality: Singaporean. Audit Committee (member), Sustainability Committee (member). Last executive position held: EVP and President APAC and EMEA of Mondelez International. Supervisory directorships and other positions: member of the Honorary Council of Food Industry Asia; member of the Advisory Board of the Lee Kong Chian School of Business at Singapore Management University; independent non-executive Director of Max BUPA Health Insurance Co Ltd. (India), Antara Senior Living Ltd. (India) and Antara Purukul Senior Living Ltd. (India); President of Pant Consulting Pte. Ltd.

Managing Board

Feike Sijbesma (1959, m), CEO/ Chairman

Position: CEO/Chairman Managing Board since May 2007; member Managing Board since July 2000.
Nationality: Dutch.
Supervisory directorships/other positions held: member Supervisory Board De Nederlandsche Bank N.V. (Dutch Central Bank); member Supervisory Board (Non-Executive Director) Unilever N.V. and PLC; member Global CEO Council Chinese Association for Friendship with Foreign Countries; Co-Chair of the High Assembly of the Carbon Pricing Leadership Coalition.
e-mail: feike.sijbesma@dsm.com

Geraldine Matchett (1972, f), CFO

Position: member Managing Board since August 2014 and CFO since December 2014. End of current term: 2018.
Nationality: British, French, Swiss.
Supervisory directorships/other positions held: none.
e-mail: geraldine.matchett@dsm.com

Stephan Tanda (1965, m)

Position: member Managing Board since May 2007. Left the company per 1 February 2017.
Nationality: Austrian.
Supervisory directorships/other positions held: board member DSM Sinochem Pharmaceuticals; board member Patheon; Chairman Industrial Biotech Section, EuropaBio (European Biotechnology Industry Association); board member BIO (US Biotechnology Innovation Organization); board member FoodDrinkEurope (European Food and Drink Industry Association); member of the Supervisory Board of Semperit AG.

Dimitri de Vreeze (1967, m)

Position: member Managing Board since September 2013. End of current term: 2017.
Nationality: Dutch.
Supervisory directorships/other positions held: Chairman Supervisory Board DSM Netherlands; board member CEFIC (European Chemical Industry Council); board member 'Fonds voor de topsport' (NOC*NSF; Dutch Olympic Committee Fund for top sport); member Supervisory Board Sanquin; member Advisory Board ECP (Electronic Commerce Platform Netherlands); board member Young Captain Foundation.
e-mail: dimitri.vreeze-de@dsm.com

What still went wrong in 2016

Introduction

Although we continuously strive to improve our performance in all areas of DSM's activities, sometimes things can still go wrong.

This chapter summarizes the most significant incidents in 2016, across the three dimensions of People, Planet and Profit. We endeavor to remedy the outcome of incidents and prevent these from recurring, as well as to identify and learn from business developments that have not progressed as planned. To this end, we investigate the root cause of any serious occurrence and take steps to close the loop to eliminate the cause and start the improvement cycle. Measures are identified and communicated as appropriate, including applying stricter requirements or operating procedures if called for.

In 2016, DSM took steps to raise awareness about mindful behavior among its workforce. In many cases, our own actions are a major contributory factor to the cause of injuries. Rushing, frustration, fatigue and complacency; being in or moving into the 'line of fire'; losing balance, traction or grip – all these things can lead to unintentional risky behavior and injuries. Several sites provided courses to support participants in increasing their awareness and promoting a mindful way of working, thus reducing injuries — at work, at home and on the road.

Where necessary, consequence management is applied to individual employees based on the 'DSM Code of Business Conduct', see page 98. We do not disclose any personal details in cases involving individuals.

In line with our reporting policy on Safety, Health and Environment and Security, this overview includes not only actual incidents but also some serious near misses. These are incidents that did not result in injury, illness or damage, but had the potential to do so, and are therefore used as a learning opportunity.

People

- At DSM Engineering Plastics in Genk (Belgium), liquid material spilled over the edge of a container onto an operator's forearm. Some of the hot material ran into his glove, causing second degree burns to the back of the right hand. In a separate incident at this site, an operator was scalded when hot water splashed onto his right forearm while removing a piece of melted material.
- At DSM Nutritional Products in Jiangshan (China), a contractor suffered a fractured toe when he was hit by a reversing forklift, whose driver had failed to notice him.
- At DSM Food Specialties in Seclin (France), an operator was caught by a sudden release of condensate from an open pipeline, causing burns to both of his legs.
- At DSM Nutritional Products in Mszczonów (Poland), an operator put his right hand on a conveyor and kicked the closing mechanism. The conveyor started to close, nipping the operator's hand in the process. He was taken to hospital and needed four stitches.
- At DSM Engineering Plastics in Emmen (Netherlands), an operator put his hand into the vacuum dome of an extruder to clean it, unaware that the extruder screw was still slowly turning. His glove and fingers were caught by the screw, resulting in the (partial) loss of three fingers on his right hand. In a separate incident at the site, a hot mixture of lactam and water flowed into an operator's shoe during a draining operation. The operator was sent to a specialized hospital where he had to undergo a skin graft.
- At DSM Nutritional Products in Schenectady (New York, USA), an operator's hand was outside the forklift he was driving when it became caught between the forklift and a wall, injuring his hand.
- At DSM Nutritional Products in Grenzach (Germany), a hose came loose during a standard restart procedure, spraying a calcium hydroxide solution, some of which got into an operator's eyes. The operator was treated on site then taken to hospital. A light but reversible erosion of the cornea of the right eye was diagnosed.
- At DSM Hydrocolloids in Tongxiang (China), a cabinet was being moved on a pallet by trolley when it toppled over, catching a contractor as it fell. This resulted in hairline fractures to the pelvis and an open wound to the right leg.
- At DSM Nutritional Products in Mairinque (Brazil), a truck exploded during unloading. It transpired that it was pressurized at the time. Fortunately nobody was hurt. The on-site learnings following this incident focused on more specific and additional contractual requirements for haulage companies as well as the institution of an audit program to ensure that the equipment these suppliers use is fit for purpose. This prompted several other sites to also run checks with their suppliers.
- During implementation of a new online tool for employee performance management, a data security flaw was discovered which potentially could have led to a privacy

incident. Immediate response actions were taken and the flaw was repaired before an incident could occur. Awareness training has been instigated around new and stricter privacy laws.
- In the US, DSM Biomedical was informed by a supplier that there may be a risk of contamination by glass particles in two of its products. After an initial investigation, we could not exclude the possibility that DSM's products may have been contaminated with glass fragments in turn, with potential risks to patient health. The products were recalled as a precaution and undelivered stock quarantined. This rapid response prevented any further consequences.
- In São Paulo (Brazil), an employee was tragically killed when commuting home on his motorcycle after working a night shift. Despite the fact that the company provides private transportation as a benefit to all employees in Brazil, the number of employees opting for the flexibility of their own means of transport is increasing. Besides offering transport, DSM offers alert driving e-courses to raise awareness around safe driving.

Planet

- In 2016, DSM again experienced a number of more minor incidents that led to a loss of primary containment (LOPC) from our installations. For example at one of our sites around $11m^3$ of ethanol was lost due to a leaking flange connection, and in another site 200 liters of hexane was lost in the tank bund when the hexane tank was overfilled. In both situations an immediate cleanup prevented any impact to the environment. The resulting waste was properly disposed of. DSM is committed to continue to reduce these incidents. A clear reduction was achieved in 2016 compared with 2015, which is reflected in the number of Process Safety Incidents recorded. For more information on this KPI, see 'Safety and health' on page 40.

Profit

- At DSM Nutritional Products in Heanor (United Kingdom), a section of the roof of a production tower was damaged in a fire following an explosion caused by a self-heating reaction resulting from cross-contamination of certain raw materials. Changes have been implemented in cleaning frequency and raw material dosing to prevent this from happening in future.
- Cybercrime attempts have become a fact of life for organizations large and small; DSM is no exception. There were various incidents of attempted cybercrime during 2016, including once again online fraudsters posing as DSM's CEO or someone close to him, appearing to send email instructions relating to financial or privileged information to employees (Brazil, Japan, the Netherlands and Turkey). Thanks to the watchfulness of the employees involved, no monies were transferred. In addition to regular reminders to employees, one of the ways we raise awareness about cybersecurity is by executing 'phishing' mail tests.
- Theft of material from a warehouse was discovered by a customer who notified us that the product was being offered online. The incident was investigated, the product was removed from eBay and inventory procedures tightened to prevent theft.
- On arrival at a customer premises, a shipment of a DSM product was discovered to have been tampered with; 20% of the product had been stolen and replaced by sand. Although this was an isolated incident, improved quality checks on the original sealing have since been made part of the standard logistics process.
- At one of DSM's shared financial service centers, an employee transferred money into a private bank account, defrauding the company. Appropriate consequence management was applied. Procedures were investigated in detail and safeguards including segregation of duties were re-enforced.
- Two cases of fraudulent expense report claims were discovered in the US, whereby hotel invoices were changed to show a longer stay than was actually the case. The employees concerned received sanctions and additional controls on expense claim checks were implemented.
- Some production restrictions at DSM Food Specialties in Seclin (France) prevented the enzyme business from fully benefiting from continued strong customer demand.

Information about the DSM share

Shares and listings

Ordinary shares in Koninklijke DSM N.V. are listed on the Euronext stock exchange in Amsterdam (Netherlands) (Stock code 00982, ISIN code NL0000009827). Options on ordinary DSM shares are traded on the European Option Exchange in Amsterdam (Euronext.liffe). In the US, a sponsored unlisted American Depositary Receipts (ADR) program is offered by Deutsche Bank Trust Co. Americas (Cusip 780249108), with four ADRs representing the value of one ordinary DSM share.

Besides the ordinary shares, 44.04 million cumulative preference shares A (cumprefs A) are in issue, which are not listed on the stock exchange; these have been placed with institutional investors. The cumprefs A have the same voting rights as ordinary shares, as their nominal value of € 1.50 per share is equal to the nominal value of the ordinary shares. Transfer of the cumprefs A requires the approval of the Managing Board, unless the shareholder is obliged by law to transfer his shares to a previous shareholder.

The average number of ordinary shares outstanding in 2016 was 175,099,827. All shares in issue are fully paid. On 31 December 2016 the company had 175,001,666 ordinary shares outstanding.

Issue of shares

The issue of shares takes place by a decision of the Managing Board. The decision is subject to the approval of the Supervisory Board. The scope of this power of the Managing Board shall be determined by a resolution of the General Meeting of Shareholders and shall relate to at most all unissued shares of the authorized capital, as applicable now or at any time in the future. In the Annual General Meeting of Shareholders of 29 April 2016 this power was extended up to and including 29 October 2017, on the understanding that this authorization of the Managing Board is limited to a number of ordinary shares with a nominal value amounting to 10% of the issued capital at the time of issue, and to an additional 10% of the issued capital at the time of issue if the issue takes place within the context of a merger or acquisition within the scope of DSM's strategy as published on the company website. The issue price will be determined by the Managing Board and shall as much as possible be calculated on the basis of the trading prices of ordinary shares on the Euronext Amsterdam Stock Exchange.

Distribution of shares

Under the Dutch Financial Markets Supervision Act, shareholdings of 3% or more in any Dutch company must be disclosed to the Netherlands Authority for the Financial Markets (AFM). According to the register kept by the AFM the following shareholders had disclosed that they have a direct or indirect (potential) interest between 3% and 10% in DSM’s total share capital on 31 December 2016:

- ASR Nederland B.V.
- Rabobank Nederland Participatie B.V.
- Delta Lloyd N.V.
- Capital Research and Management Company and Capital Group International
- BlackRock, Inc.

Repurchase of own shares

The company may acquire paid-up own shares by virtue of a decision of the Managing Board, provided that the par value of the acquired shares in its capital amounts to no more than one tenth of the issued capital. Such a decision is subject to the approval of the Supervisory Board. In the Annual General Meeting of Shareholders of 29 April 2016 the Managing Board was authorized to acquire own shares for a period of 18 months from said date (i.e. up to and including 29 October 2017), up to a maximum of 10% of the issued capital, provided that the company will hold no more shares in stock than at maximum 10% of the issued capital.

DSM repurchased a number of its own shares during 2016 for the purpose of covering the company's commitments under existing management and employee option plans and stock dividend. Two programs were run for this purpose during the year, the first from 22 February to 21 July 2016 and the second from 4 November to 8 December 2016. In total DSM repurchased 5,200,000 of its own shares for a combined consideration of € 272.8 million.

Development of the number of ordinary DSM shares

	2016			2015
	Issued	Repurchased	Outstanding	Outstanding
Balance at 1 January	181,425,000	6,501,973	174,923,027	173,536,815
Changes:				
Reissue of shares in connection with exercise of option rights	-	(3,243,102)	3,243,102	1,056,880
Repurchase of shares	-	5,200,000	(5,200,000)	(2,300,000)
Dividend in the form of ordinary shares	-	(2,035,537)	2,035,537	2,629,332
Balance at 31 December	181,425,000	6,423,334	175,001,666	174,923,027
DSM share prices on Euronext Amsterdam (€ per ordinary share):				
Highest closing price			64.18	55.11
Lowest closing price			41.40	39.62
At 31 December			56.96	46.28
Market capitalization at 31 December (€ million)[1]			10,334	8,396

[1] Source: Bloomberg

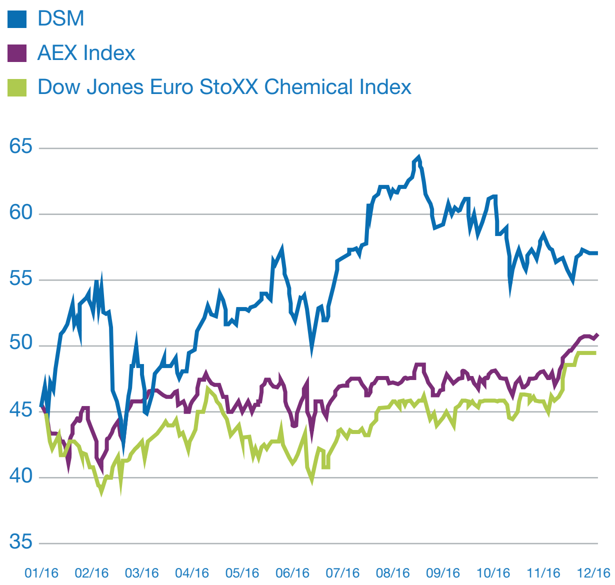
Geographical spread of DSM shares outstanding

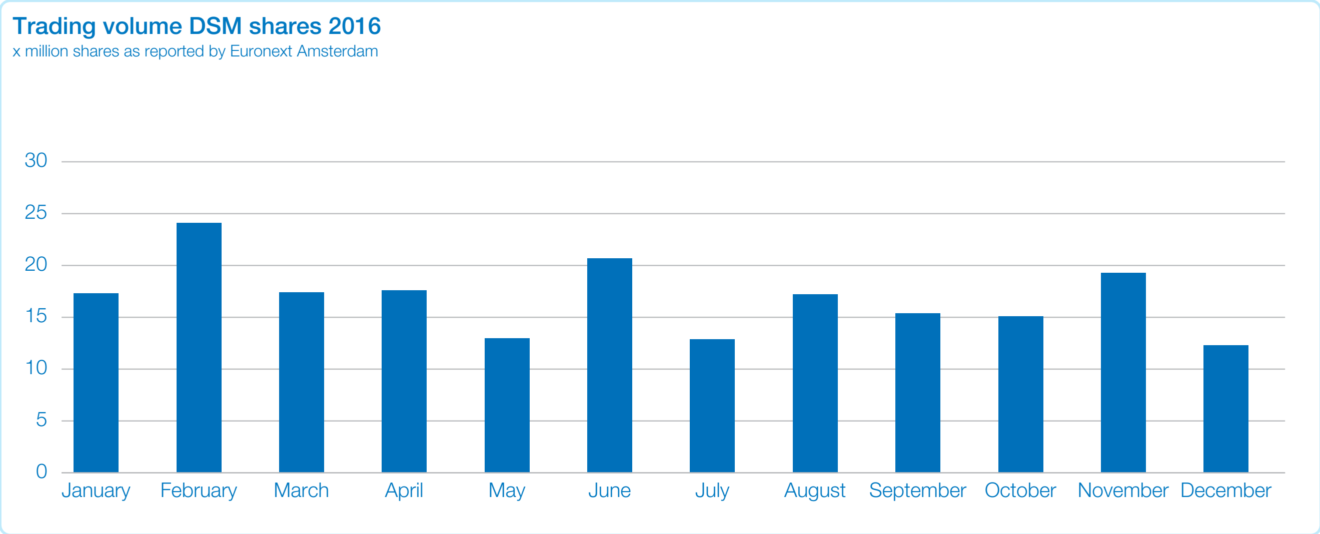
in % (excl. cumprefs A)	2016	2015
North America	39	34
United Kingdom	17	14
Netherlands	16	17
France	7	7
Switzerland	5	6
Germany	4	5
Asia-Pacific	4	5
Other countries	8	12

DSM share price development versus AEX and Dow Jones Euro StoXX Chemical Index, 2016

(Rebased versus DSM share price)

x €





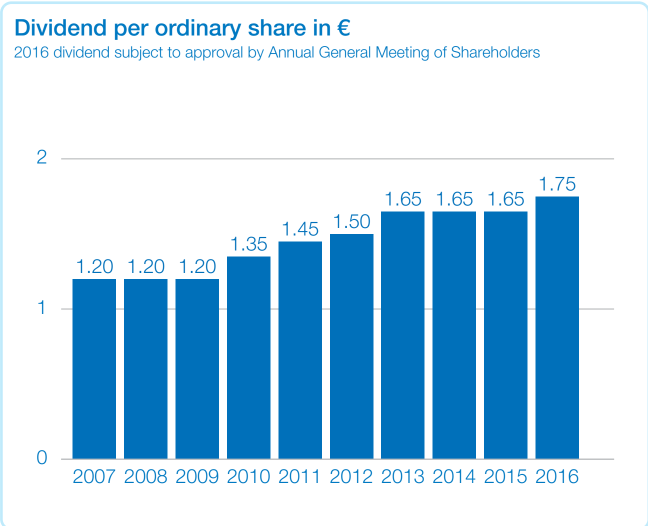
Article 10 of Directive 2004/25

With regard to the information referred to in the Resolution of article 10 of the EC Directive pertaining to a takeover bid which is required to be provided according to Dutch law, the following can be reported:

- Information on major shareholdings can be found above (Distribution of shares).
- There are no special statutory rights attached to the shares of the company.
- There are no restrictions on the voting rights of the company's shares. When convening a General Meeting of Shareholders, the Managing Board is entitled to determine a registration date in accordance with the relevant provisions of the Dutch Civil Code.
- The applicable provisions regarding the appointment and dismissal of members of the Managing Board and the Supervisory Board and amendments to the Articles of Association can be found in the chapter 'Corporate Governance' on page 93.
- The powers of the Managing Board regarding the issue and repurchase of shares in the company can be found in the sections Issue of shares and Repurchase of own shares above.
- Other information can be found in the 'Notes to the consolidated financial statements' (16 'Equity', 19 'Borrowings', 27 'Share-based compensation').

Dividend

DSM's dividend policy is to provide a stable and preferably rising dividend. DSM proposes to increase the dividend to €1.75 per ordinary share for 2016. This will be proposed to the Annual General Meeting of Shareholders to be held on 3 May 2017. An interim dividend of €0.55 per ordinary share having been paid in August 2016, the final dividend would then amount to €1.20 per ordinary share. Dividend in cash will be paid after deduction of 15% Dutch dividend withholding tax. The ex-dividend date is 5 May 2017.



Sustainability statements

Sustainability statements – People

	2016	2015	2014	2013	2012
Total workforce	20,786	20,796	21,351	23,485	23,498
Female / male ratio	27/73	28/72	27/73	26/74	26/74
% by age category					
<26 years	6	5	6	6	6
26-35 years	25	26	25	24	24
36-45 years	28	30	29	30	30
46-55 years	27	27	28	28	28
>55	14	12	12	12	12
% non-Dutch					
Executives	53	49	51	50	47
Management	67	68	64	65	63
Other	81	82	77	78	76
% female					
Executives	15	15	12	11	10
Management	26	27	24	23	23
Other	29	29	28	27	27
% executive hires					
Non-Dutch	88	79	88	75	58
Female	13	38	25	23	8
% new hires by region					
Netherlands	5	11	11	10	12
Rest of Europe	23	22	19	23	21
North America	27	16	26	26	23
China	20	18	18	16	22
Rest of Asia-Pacific	8	13	18	19	18
Rest of the world	17	22	8	6	4
Total number new hires (excluding acquisitions)	1,730	2,171	1,997	1,834	2,073
Outflow of employees					
Voluntary resignations	585	1,153	1,011	1,043	1,094
Dismissed	781	647	411	224	507
Reorganization	208	230	221	408	323
Retirements	143	170	167	259	225
Deceased	12	12	11	34	22
Total outflow (excluding divestments)	1,729	2,212	1,821	1,968	2,171
Divestments	57	2,324	2,479	78	18
Voluntary resignations (% total workforce)	2.8	5.5	4.7	4.4	4.7
Total resignations (% total workforce)	8.3	10.6	8.5	8.4	9.2
Training in hours per employee	25	29	25	25	24
Net sales per employee (x € 1,000)	386	374	409	401	399
Safety					
Frequency Index of Recordable Injuries (per 100 DSM employees and contractor employees)	0.33	0.41	0.47	0.38	0.44

Sustainability statements – Brighter Living Solutions

	2016	2015	2014	2013	2012
Brighter Living Solutions sales as % of net sales	63	-[1]	-[1]	-[1]	-[1]

[1] 2016 was the first year of reporting; consequently, there are no comparative figures for the previous years

Sustainability statements – Planet

	2016	2015	2014	2013	2012
Energy and greenhouse gases					
Energy use (in petajoules)	22.6	20.9	39.1	41.1	40.6
Energy efficiency improvement (in %)	2[2]				
Greenhouse-gas emissions (in CO_2equivalents x million tons)	1.5	1.1	4.2	4.2	4.3
Emissions to air					
Volatile Organic Compounds (x 1,000 tons)	8.9	3.1	4.2	4.3	3.5
Nitrogen oxide (NO_x) (x 1,000 tons)	0.8	0.4	1.5	1.6	1.7
Sulfur dioxide (SO_2) (x 1,000 tons)	0.33	0.04	0.08	0.07	0.13
Discharges to water and landfill					
Chemical Oxygen Demand discharges to surface waters (x 1,000 tons)	2.4	2.1	3.9	4.8	5.5
Waste recycled (in %)	83[1]				
(Landfilling) Non-hazardous waste (x 1,000 tons)	17.5	12.9	18.2	22.7	29.9
Water					
Water consumption (x million m^3)	22[1]				
Water use (x million m^3)	104	101	118	150	149
Raw materials					
Renewable raw materials (in %)	16.5	16	10.8	9.9	8.7
Biodiversity					
Sites in or adjacent to protected areas (in %)	60	58	52	40	40
Fines (in €)	27,900	35,600	62,500	62,300	45,100
Non-monetary sanctions	2	5	4	4	6
Environmental incidents	109[3]	257	297	261	316
Environmental complaints	21	31	56	42	34

[1] 2016 was the first year of reporting; consequently, there are no comparative figures for the previous years
[2] Compared to 2015
[3] As of 2016, the Loss of Primary Containment of non-hazardous substances is no longer included in this number

DSM bases its sustainability reporting on best practice standards and international guidelines. Most important are the Standards of the Global Reporting Initiative (GRI). A detailed overview of how DSM reports according to the GRI Standards comprehensive indicators, including a reference to relevant sections in this report, is provided on the company website. DSM aligns with the recommendations of the International Integrated Reporting Council (IIRC) Framework where possible.

Consolidated financial statements

Summary of significant accounting policies

Basis of preparation
DSM's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and the provisions of section 362-8 of Book 2 of the Dutch Civil Code. The accounting policies applied by DSM comply with IFRS and the pronouncements of the International Financial Reporting Interpretation Committee (IFRIC) effective at 31 December 2016.

Consolidation
The consolidated financial statements comprise the financial statements of Royal DSM and its subsidiaries (together 'DSM' or 'group'). As a parent DSM is exposed, or has right to, the variable returns from its involvement with its subsidiaries and has the ability to affect the returns through its power over the subsidiary. The financial data of subsidiaries are fully consolidated. Non-controlling interests in the group's equity and profit and loss are stated separately. A joint arrangement is an entity in which DSM holds an interest and which is jointly controlled by DSM and one or more other venturers under a contractual arrangement. A joint arrangement can either be a joint venture where DSM and the other partner(s) have rights to the net assets of the arrangement or a joint operation where DSM and the partner(s) have rights to the assets, and obligations for the liabilities to the arrangement. For joint ventures the investment in the net assets is recognized and accounted for in accordance with the equity method. For a joint operation, assets, liabilities, revenues and expenses are recognized in the financial statements of DSM in accordance with the contractual entitlement or obligations of DSM.

Subsidiaries are consolidated from the acquisition date until the date on which DSM ceases to have control. From the acquisition date onwards, all intra-group balances and transactions and unrealized profits or losses from intra-group transactions are eliminated, with one exception: unrealized losses are not eliminated if there is evidence of an impairment of the asset transferred. In such cases an impairment of the asset is recognized.

Business combinations
Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, including liabilities incurred, measured at acquisition date fair value, and the amount of any non-controlling interest in the acquiree. Acquisition costs incurred are expensed.

As of the acquisition date identifiable, assets acquired, liabilities assumed and any non-controlling interest in the acquiree are recognized separately from goodwill. Identifiable assets acquired and the liabilities assumed are measured at acquisition date fair value. For each business combination, DSM elects whether it measures the non-controlling interest in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Any contingent consideration payable is measured at fair value at the acquisition date.

Segmentation
Segment information is presented in respect to the group's operating segments about which separate financial information is available that is regularly evaluated by the chief operating decision maker. DSM has determined that Nutrition, Materials and the Innovation Center represent reportable segments in addition to Corporate Activities. The Managing Board decides how to allocate resources and assesses the performance of the clusters. Cluster performance is reported and reviewed down to the level of Adjusted EBITDA. The clusters are organized in accordance with the type of products produced and the nature of the markets served. The same accounting policies that are applied for the consolidated financial statements of DSM are also applied for the operating segments. Prices for transactions between segments are determined on an arm's length basis. Segment results, assets and liabilities include items directly attributable to a segment as well as those that can reasonably and consistently be allocated. Selected information on a country and regional basis is provided in addition to the information about operating segments.

Foreign currency translation
The presentation currency of the group is the euro.

Each entity of the group records transactions and balance sheet items in its functional currency. Transactions denominated in a currency other than the functional currency are recorded at the spot exchange rates prevailing at the date of the transactions. Monetary assets and liabilities denominated in a currency other than the functional currency of the entity are translated at the closing rates. Exchange differences resulting from the settlement of these transactions and from the translation of monetary items are recognized in the income statement.

Non-monetary assets that are measured on the basis of historical costs denominated in a currency other than the functional currency continue to be translated against the rate at initial recognition and will not result in exchange differences.

On consolidation, the balance sheets of subsidiaries that do not have the euro as their functional currency are translated into euro at the closing rate. The income statements of these entities are translated into euro at the average rates for the relevant period. Goodwill paid on acquisition is recorded in the functional currency of the acquired entity. Exchange differences arising from the translation of the net investment in entities with a functional currency other than the euro are recorded in Other comprehensive income. The same applies to exchange differences arising from borrowings and other financial instruments in so far as those instruments hedge the currency risk related to the net investment. On disposal of an entity with a functional currency other than the euro, the cumulative exchange differences relating to the translation of the net investment are recognized in profit or loss.

Distinction between current and non-current

An asset (liability) is classified as current when it is expected to be realized (settled) within 12 months after the balance sheet date.

Intangible assets

Goodwill represents the excess of the cost of an acquisition over DSM's share in the net fair value of the identifiable assets and liabilities of an acquired subsidiary, joint venture or associate. Goodwill paid on acquisition of subsidiaries is included in intangible assets. Goodwill paid on acquisition of joint ventures or associates is included in the carrying amount of these entities. Goodwill recognized as an intangible asset is not amortized but tested for impairment annually and when there are indications that the carrying amount may exceed the recoverable amount. A gain or loss on the disposal of an entity includes the carrying amount of goodwill relating to the entity sold.

Intangible assets acquired in a business combination are recognized at fair value on the date of acquisition and subsequently amortized over their expected useful lives, which vary from 4 to 20 years.

Separately acquired licenses, patents, drawing rights and application software are carried at historical cost less straight-line amortization and less any impairment losses. The expected useful lives vary from 4 to 15 years. Costs of software maintenance are expensed when incurred. Capital expenditure that is directly related to the development of application software is recognized as an intangible asset and amortized over its estimated useful life (5-8 years).

Research costs are expensed when incurred. Development expenditure is capitalized if the recognition criteria are met and if it is demonstrated that it is technically feasible to complete the asset; that the entity intends to complete the asset; that the entity is able to sell the asset; that the asset is capable of generating future economic benefits; that adequate resources are available to complete the asset; and that the expenditure attributable to the asset can be reliably measured. Development expenditure is amortized over the asset's useful life.

Property, plant and equipment

Property, plant and equipment are measured at cost less depreciation calculated on a straight-line basis and less any impairment losses. Interest during construction is capitalized. Expenditures relating to major scheduled turnarounds are capitalized and depreciated over the period up to the next turnaround.

Property, plant and equipment are systematically depreciated over their estimated useful lives. The estimated remaining lives of assets are reviewed every year, taking account of commercial and technological obsolescence as well as normal wear and tear. The initially assumed expected useful lives are in principle as follows: for buildings 10-50 years; for plant and machinery 5-15 years; for other equipment 4-10 years. Land is not depreciated.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use or the sale of the asset. Any gain or loss arising on derecognition of the asset is recorded in profit or loss.

Leases

Finance leases, which transfer to the group substantially all the risks and benefits incidental to ownership of the leased item, are capitalized at inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. All other leases are operating leases.

Lease payments for finance leases are apportioned to finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are included in interest costs. Capitalized leased assets are depreciated over the shorter of the estimated useful life of the asset or the lease term. Operating lease payments are recognized as an expense over the lease term.

Associates and joint ventures

An associate is an entity over which DSM has significant influence but no control or joint control, usually evidenced by a shareholding that entitles DSM to between 20% and 50% of the voting rights. A joint venture is an entity where DSM has joint control and is entitled to its share of the assets and liabilities. Investments in associates and joint ventures are accounted for by the equity method, which involves recognition in the income statement of DSM's share of the associate's or joint venture's profit or loss for the year determined in accordance with the accounting policies of DSM. DSM's interest in an associate is carried in the balance sheet at its share in the net assets of the associate together with goodwill paid on acquisition, less any impairment loss.

When DSM's share in the loss of an associate or joint venture exceeds the carrying amount of that entity, the carrying amount is reduced to zero. No further losses are recognized, unless DSM has responsibility for obligations relating to the entity.

Non-derivative financial assets and financial liabilities

DSM initially recognizes loans and receivables and debt securities on the date when they are originated. All other financial assets and financial liabilities are initially recognized on the date when DSM becomes a party to the contractual provisions of the instrument. DSM derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred, or when DSM neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control over the transferred asset. DSM derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expire.

Financial assets and financial liabilities are offset and the net amount is presented in the statement of financial position when DSM has a legal right to offset the amounts and intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

Loans and long-term receivables are measured at fair value upon initial recognition and subsequently at amortized cost, if necessary after deduction for impairment. The proceeds from these assets and the gain or loss upon their disposal are recognized in profit or loss.

Other financial assets

Other financial assets comprise loans to associates and joint ventures, other participations, other receivables and other deferred items.

Other participations comprise equity interests in entities in which DSM has no significant influence; they are accounted for as available-for-sale securities. These other participations are measured against fair value, with changes in fair value being recognized in Other comprehensive income (Fair value reserve). A significant or prolonged decline of the fair value of an equity interest below cost represents an impairment, which is recognized in profit or loss. On disposal, the cumulative fair value adjustments of the related other participations are released from equity and included in the income statement. If a reliable fair value cannot be established, the other participations are recognized at cost. The proceeds from these other participations and the gain or loss upon their disposal are recognized in profit or loss.

Impairment of assets

When there are indications that the carrying amount of a non-current asset (an intangible asset or an item of property, plant and equipment) may exceed the estimated recoverable amount (the higher of its value in use and fair value less costs to sell), the possible existence of an impairment loss is investigated. If an asset does not generate largely independent cash flows, the recoverable amount is determined for the cash generating unit (CGU) to which the asset belongs. In assessing the value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market interest rates and the risks specific to the asset.

When the recoverable amount of a non-current asset is less than its carrying amount, the carrying amount is impaired to its recoverable amount and an impairment charge is recognized in profit or loss. An impairment loss is reversed when there has been a change in estimate that is relevant for the determination of the asset's recoverable amount since the last impairment loss was recognized.

All financial assets are reviewed for impairment. If there is objective evidence of impairment as a result of one or more events after initial recognition, an impairment loss is recognized in profit or loss. Impairment losses for goodwill and other participations are never reversed.

Inventories

Inventories are stated at the lower of cost and net realizable value. The first in, first out (FIFO) method of valuation is used unless the nature of the inventories requires the use of a different cost formula, in which case the weighted average cost method is used. The cost of intermediates and finished goods includes directly attributable costs and related production overhead expenses. Net realizable value is determined as the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Products whose manufacturing cost cannot be calculated because of joint cost components are stated at net realizable value after deduction of a margin for selling and distribution efforts.

Current receivables

Current receivables are initially recognized at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortized cost using the effective interest method, which generally corresponds to nominal value, less an adjustment for bad debts.

Current investments

Current investments are initially recognized at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortized cost using the effective interest method. Deposits with banks with a maturity between 3 and 12 months are classified as current investments.

Cash and cash equivalents

Cash and cash equivalents comprise cash at banks and in hand and deposits held at call with banks with a maturity of less than three months at inception. Bank overdrafts are included in current liabilities. Cash and cash equivalents are measured at nominal value.

Non-current assets and disposal groups held for sale

Non-current assets and disposal groups (assets and liabilities relating to an activity that is to be sold) are classified as 'held for sale' if their carrying amount is to be recovered principally through a sales transaction rather than through continuing use. The reclassification takes place when the assets are available for immediate sale and the sale is highly probable. These conditions are usually met as from the date on which a letter of intent or agreement to sell is ready for signing. Non-current assets held for sale and disposal groups are measured at the lower of carrying amount and fair value less costs to sell. Non-current assets held for sale are not depreciated or amortized. For transparency, non-current assets and disposal groups that will be contributed to joint ventures are reported separately from other assets and liabilities held for sale.

Discontinued operations
Discontinued operations comprise those activities that were disposed of during the period or which were classified as held for sale at the end of the period, and represent a separate major line of business or geographical area that can be clearly distinguished for operational and financial reporting purposes.

Royal DSM Shareholders' equity
DSM's ordinary shares and cumulative preference shares are classified as Royal DSM Shareholders' equity. This is the case for the latter, as there is no mandatory redemption, and distributions to the shareholders are at the discretion of DSM. The price paid for repurchased DSM shares (treasury shares) is deducted from Royal DSM Shareholders' equity until the shares are cancelled or reissued. Treasury shares are presented in the treasury share reserve. When treasury shares are sold or reissued, the amount received is recognized as an increase in equity, and the result on the transaction is presented as share premium. Dividend to be distributed to holders of cumulative preference shares is recognized as a liability when the Supervisory Board approves the proposal for profit distribution. Dividend to be distributed to holders of ordinary shares is recognized as a liability when the Annual General Meeting of Shareholders approves the profit appropriation.

Provisions
Provisions are recognized when all of the following conditions are met: 1) there is a present legal or constructive obligation as a result of past events; 2) it is probable that a transfer of economic benefits will settle the obligation; and 3) a reliable estimate can be made of the amount of the obligation.

The probable amount required to settle long-term obligations is discounted if the effect of discounting is material. Where discounting is used, the increase in the provision due to the passage of time is recognized as interest costs.

Borrowings
Borrowings are initially recognized at fair value of the proceeds received, net of transaction costs. Subsequently, borrowings are stated at amortized cost using the effective interest method. Amortized cost is calculated taking into account any discount or premium. Interest expenses are recorded in profit or loss.

Where the interest rate risk relating to a long-term borrowing is hedged through a fair value hedge, and the hedge is effective, the carrying amount of the long-term loan is adjusted for changes in fair value of the interest component of the hedged loan.

Other current liabilities
Other current liabilities are measured at amortized cost, which generally corresponds to the nominal value.

Revenue recognition
Revenue from the sale of goods is recognized when significant risks and rewards of ownership are transferred to the buyer. Net sales represent the invoice value less estimated rebates and cash discounts, and excluding indirect taxes.

Royalty income is recognized in Other operating income or in Net sales on an accrual basis in accordance with the substance of the relevant agreements. Royalty income is reported in Net sales when licensing-out technologies is part of the ordinary and recurring activities of a business. Income that relates to the sale or out-licensing of technologies or technological expertise is recognized in profit or loss as of the effective date of the respective agreement if all rights relating to the technologies and all obligations resulting from them have been transferred under the contract terms. However, if rights to the technologies continue to exist or obligations resulting from them have yet to be fulfilled, the payments received are deferred accordingly. Interest income is recognized on a time-proportion basis using the effective interest method. Dividend income is recognized when the right to receive payment is established.

Government grants
Government grants are recognized at their fair value if there is reasonable assurance that the grant will be received and all related conditions will be complied with. Cost grants are recognized as income over the periods necessary to match the grant on a systematic basis to the cost that it is intended to compensate. If the grant is an investment grant, its fair value is initially recognized as deferred income in Other non-current liabilities and then released to profit or loss over the expected useful life of the relevant asset.

Share-based compensation
The costs of option plans are measured by reference to the fair value of the options on the date on which the options are granted. The fair value is determined using the Black-Scholes model, taking into account market conditions linked to the price of the DSM share. The costs of these options are recognized in profit or loss (Employee benefits costs) during the vesting period, together with a corresponding increase in Equity in the case of equity-settled options or Other non-current liabilities in the case of cash-settled options (Share Appreciation Rights). No expense is recognized for options that do not ultimately vest, except for options where vesting is conditional upon a market condition, which are treated as vesting, irrespective of whether or not the market condition is satisfied, provided that all other performance conditions are met.

Performance shares and restricted share units (matching shares) are granted free of charge and vest after three years on the achievement of previously determined targets. The cost of performance shares and restricted share units is measured by reference to the fair value of the DSM shares on the date on which the performance shares and restricted share units were granted and is recognized in profit or loss (Employee benefits costs) during the vesting period, together with a corresponding increase in equity.

Emission rights

DSM is subject to legislation encouraging reductions in greenhouse-gas emissions and has been awarded emission rights (principally CO_2 emission rights) in a number of jurisdictions. Emission rights are reserved for meeting delivery obligations and are recognized at cost (usually zero). Revenue is recognized when surplus emission rights are sold to third parties. When actual emissions exceed the emission rights available to DSM, a provision is recognized for the expected additional costs.

Alternative performance measures (APMs)

Up until now, DSM used the term exceptional items to refer to material items of income or expense. As of 2016, DSM has changed this term from 'Exceptional Items' to 'APM adjustments'. These APM adjustments to operating profit relate to material items of income and expense arising from circumstances such as:

- acquisitions/divestments;
- restructuring;
- impairments; and
- other.

'Other' APM adjustments can be related to onerous contracts and litigation settlements. Other than items related to acquisition and integration costs incurred in the first year from the acquisition date - including non-recurring inventory value adjustments - the threshold is >€ 10 million.

Income tax

Income tax expense is recognized in the income statement except to the extent that it relates to an item recognized directly in Other comprehensive income or Shareholders' equity.

Current tax is the expected tax payable or receivable on the taxable income for the year, using tax rates enacted at the balance sheet date, and any adjustment to tax payable in respect to previous years. Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the carrying amount of assets and liabilities and their tax base. Deferred tax assets and liabilities are measured at the tax rates that have been enacted or substantially enacted at the balance sheet date and are expected to apply when the related deferred tax assets are realized or the deferred tax liabilities are settled. Deferred tax assets, including assets arising from losses carried forward and tax credits, are recognized to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences and unused tax losses can be utilized. Deferred tax assets and liabilities are stated at nominal value.

Deferred taxes are not provided for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit, and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. Deferred tax assets and deferred tax liabilities are offset and presented net when there is a legally enforceable right to offset, and the assets and liabilities relate to income taxes levied by the same taxation authority.

Financial derivatives

The group uses financial derivatives such as foreign currency forward contracts and interest rate swaps to hedge risks associated with foreign currency and interest rate fluctuations. Financial derivatives are initially recognized in the balance sheet at fair value. Subsequently, financial derivatives, bank balances and deposits in foreign currency are valued against the rates applicable on the balance sheet closing date. Changes in fair value are recognized in profit or loss unless cash flow hedge accounting or net investment hedge accounting is applied. For the measurement basis, see page 181.

Changes in the fair value of financial derivatives designated and qualifying as cash flow hedges are recognized in Other comprehensive income (Hedging reserve) to the extent that the hedge is effective. Upon recognition of the related asset or liability, the cumulative gain or loss is transferred from the Hedging reserve and included in the carrying amount of the hedged item if it is a non-financial asset or liability. Any ineffective portion of the changes of the fair value of the derivative is recognized immediately in profit and loss. If the forecasted transaction is no longer expected to occur, the hedge no longer meets the criteria for hedge accounting, the hedging instrument expires or is sold, terminated or exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. If the forecast transaction is no longer expected to occur then the amount accumulated in equity is reclassified to profit or loss. If the hedged item is a financial asset or liability, the gain or loss is transferred to profit or loss. Changes in the fair value of financial derivatives designated and qualifying as net investment hedges are recognized in Other comprehensive income (Translation reserve) to the extent that the hedge is effective and the change in fair value is caused by changes in currency exchange rates. Accumulated gains and losses are released from Other comprehensive income and are included in profit or loss when the net investment is disposed of. Changes in the fair value of financial derivatives designated and qualifying as fair value hedges are immediately recognized in the income statement, together with any changes in the fair value of the hedged assets or liabilities attributable to the hedged risk.

Pensions and other post-employment benefits

DSM has both defined contribution plans and defined benefit plans. In the case of defined contribution plans, obligations are limited to the payment of contributions, which are recognized as Employee benefits costs. In the case of defined benefit plans, the aggregate of the value of the defined benefit obligation and the fair value of plan assets for each plan is recognized as a net defined benefit liability or asset. Defined benefit obligations are determined using the projected unit credit method. Plan assets are recognized at fair value. If the fair value of plan assets exceeds the present value of the defined benefit obligation, a net asset is only recognized to the extent that the asset is available for refunds to the employer or for reductions in future contributions to the plan. Defined benefit pension costs consist of three elements: service costs, net interest, and remeasurements. Service costs are part of Employee benefits costs and consist of current service costs. Past service costs and results of plan settlements are included in Other operating income or expense. Net interest is part of Financial income and expense and is determined on the basis of the value of the net defined benefit asset or liability at the start of the year, and on the interest on high-quality corporate bonds. Remeasurements are actuarial gains and losses, the return (or interest cost) on net plan assets (or liabilities) excluding amounts included in net interest and changes in the effect of the asset ceiling. These remeasurements are recognized in Other comprehensive income as they occur and are not recycled through profit or loss at a later stage.

Effect of new accounting standards

The International Accounting Standards Board (IASB) and IFRIC have issued new standards, amendments to existing standards and interpretations, some of which are not yet effective or have not yet been endorsed by the European Union.

In 2016, no new or amended standards had to be applied for the first time that had an impact on the financial position, performance or disclosures of DSM. Neither were new or amended standards adopted early and applied in 2016 for the first time.

Effect of forthcoming accounting standards not yet applied

The following accounting standards are forthcoming but are not yet being applied by DSM. They will be adopted on the required effective date:

IFRS 9, ‘Financial Instruments’ will be effective for annual periods beginning on or after 1 January 2018. During 2016, DSM has performed a high-level impact assessment of IFRS 9. DSM expects no significant balance sheet and equity impact on the classification and measurement of its financial instruments, no significant impact due to the implementation of the expected credit loss model and no significant impact on DSM's hedge accounting practices.

IFRS 15, 'Revenue from Contracts with Customers', establishes a new five-step approach to revenue recognition that applies to all entities. The new standard is effective for annual reporting periods beginning on or after 1 January 2018. The impact of this new standard on DSM’s financial position and performance is not expected to be significant. An analysis was performed for DSM’s main revenue categories ‘goods sold’, ‘services rendered’ and ‘royalties from ordinary activities’. From an accounting perspective IFRS 15 is expected to impact the latter category, however this impact is not considered significant as the royalty revenue accounts for around 0.1% of total revenue (2015: 0.2%).

IFRS 16, ‘Leases’, establishes a new model for lessee accounting that requires a lessee to recognize assets and liabilities for the rights and obligations created by leases. The new standard is effective for annual reporting periods beginning on or after 1 January 2019. The impact of this new standard on DSM’s financial position and performance is currently being investigated. Please refer to the contingent liabilities and other financial obligations (Note 22) for DSM's current operating lease commitments.

The amendments to IAS 7 involving the ‘Statement of Cash Flows’ will have limited impact, because DSM already provides a net debt reconciliation on a voluntary basis. The additional requirements with respect to IAS 12 involving the ‘Recognition of Deferred Tax Assets for Unrealised Losses’ are taken into account in the annual evaluation of the tax position. These amendments and requirements are effective for annual periods beginning on or after 1 January 2017.

New IFRIC interpretations are not expected to have a material effect on the financial statements of DSM.

Consolidated statements

Consolidated income statement

x € million	Notes	2016			2015		
		Continuing operations	Discontinued operations[1]	Total	Continuing operations	Discontinued operations[1]	Total
Net sales	5	7,920	-	7,920	7,722	1,213	8,935
Cost of sales	5	(5,262)	-	(5,262)	(5,413)	(1,190)	(6,603)
Gross margin		**2,658**	**-**	**2,658**	**2,309**	**23**	**2,332**
Marketing and sales		(1,132)	-	(1,132)	(1,060)	(59)	(1,119)
Research and development		(309)	-	(309)	(332)	(8)	(340)
General and administrative		(552)	-	(552)	(534)	(11)	(545)
Other operating income		109	-	109	86	6	92
Other operating expense		(89)	(28)	(117)	(107)	(9)	(116)
	5	**(1,973)**	**(28)**	**(2,001)**	**(1,947)**	**(81)**	**(2,028)**
Operating profit		**685**	**(28)**	**657**	**362**	**(58)**	**304**
Financial income	6	23	-	23	10	3	13
Financial expense	6	(156)	-	(156)	(174)	(13)	(187)
Profit before income tax expense		552	(28)	524	198	(68)	130
Income tax expense	7	(89)	-	(89)	(46)	(22)	(68)
Share of the profit of associates and joint ventures	10	(38)	-	(38)	30	-	30
Other results related to associates and joint ventures	10	232	-	232	-	-	-
Profit for the year		**657**	**(28)**	**629**	**182**	**(90)**	**92**
Of which:							
Profit attributable to non-controlling interests	17	8	-	8	(2)	6	4
Net profit attributable to equity holders of Koninklijke DSM N.V.		**649**	**(28)**	**621**	**184**	**(96)**	**88**
Dividend on cumulative preference shares		(4)	-	(4)	(10)	-	(10)
Net profit available to holders of ordinary shares		**645**	**(28)**	**617**	**174**	**(96)**	**78**
Earnings per share (EPS) (in €):							
- Net basic EPS	2	3.68	(0.16)	3.52	1.00	(0.55)	0.45
- Net diluted EPS	2	3.67	(0.16)	3.51	1.00	(0.55)	0.45

[1] See disposals in Note 3, 'Change in the scope of the consolidation'

Please refer to Note 2 'Alternative performance measures' for the reconciliation to Adjusted EBITDA of € 1,262 million and other adjusted IFRS performance measures.

Consolidated statement of comprehensive income

x € million	2016	2015
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit pension plans	(8)	(60)
Exchange differences on translation of foreign operations relating to the non-controlling interests	-	14
Equity accounted investees - share of Other comprehensive income	(6)	1
Items that may subsequently be reclassified to profit or loss		
Exchange differences on translation of foreign operations		
- Change for the year	216	78
- Reclassification adjustment to the income statement related to discontinued operations	(19)	(59)
Fair value reserve		
- Change for the year	7	6
- Reclassification adjustment to the income statement	-	-
Hedging reserve		
- Change for the year	(52)	(52)
- Reclassification adjustment to the income statement	52	51
- Reclassification adjustment to deferred items	(4)	(4)
Equity accounted investees - share of Other comprehensive income	(1)	(18)
Other comprehensive income, before tax	**185**	**(43)**
Income tax (expense)/income relating to:		
- Remeasurements of defined benefit plans	5	3
- Exchange differences on translation of foreign operations	1	25
- Fair value reserve	-	-
- Hedging reserve	2	(27)
Total income tax (expense) / income	8	1
Other comprehensive income, net of tax	**193**	**(42)**
Profit for the year	629	92
Total comprehensive income	**822**	**50**
Of which:		
- Attributable to non-controlling interests	8	17
- Attributable to equity holders of Koninklijke DSM N.V.	814	33

Consolidated balance sheet at 31 December

x € million	Notes	2016	2015
Assets			
Non-current assets			
Intangible assets	8	3,188	3,228
Property, plant and equipment	9	3,325	3,171
Deferred tax assets	7	355	366
Share in associates and joint ventures	10	586	644
Other financial assets	11	463	419
		7,917	**7,828**
Current assets			
Inventories	12	1,800	1,627
Trade receivables	13	1,504	1,349
Income tax receivables	13	62	71
Other current receivables	13	87	136
Financial derivatives	23	40	47
Current investments	14	944	9
Cash and cash equivalents	15	604	665
		5,041	3,904
Assets held for sale	3	-	11
		5,041	**3,915**
Total		**12,958**	**11,743**
Equity and liabilities			
Equity	16		
Shareholders' equity		6,072	5,541
Non-controlling interests	17	108	90
		6,180	**5,631**
Non-current liabilities			
Deferred tax liabilities	7	278	319
Employee benefits liabilities	24	490	496
Provisions	18	128	98
Borrowings	19	2,552	2,557
Other non-current liabilities	20	158	228
		3,606	**3,698**
Current liabilities			
Employee benefits liabilities	24	40	44
Provisions	18	54	41
Borrowings	19	853	253
Financial derivatives	23	253	232
Trade payables	21	1,376	1,168
Income tax payables	21	56	32
Other current liabilities	21	540	642
		3,172	2,412
Liabilities held for sale	3	-	2
		3,172	**2,414**
Total		**12,958**	**11,743**

Consolidated statement of changes in equity (Note 16)

x € million	Share capital	Share premium	Treasury shares	Other reserves	Retained[1] earnings	Total	Non-controlling interests	Total equity
Balance at 1 January 2015	**338**	**489**	**(349)**	**166**	**5,079**	**5,723**	**213**	**5,936**
Dividend	-	-	-	-	(297)	(297)	(13)	(310)
Options / performance shares granted	-	-	-	29	-	29	-	29
Options / performance shares exercised / cancelled	-	-	-	(15)	15	-	-	-
Proceeds from reissued shares	-	-	152	-	24	176	-	176
Change in DSM's share in subsidiaries	-	-	-	-	-	-	(127)	(127)
Repurchase of shares	-	-	(122)	-	-	(122)	-	(122)
Other	-	-	-	(7)	6	(1)	-	(1)
Total comprehensive income	-	-	-	(2)	35	33	17	50
Balance at 31 December 2015	**338**	**489**	**(319)**	**171**	**4,862**	**5,541**	**90**	**5,631**
Dividend	-	-	-	-	(296)	(296)	(5)	(301)
Options / performance shares granted	-	-	-	32	-	32	-	32
Options / performance shares exercised / cancelled	-	-	-	(30)	30	-	-	-
Proceeds from reissued shares	-	-	253	-	-	253	-	253
Change in DSM's share in subsidiaries	-	-	-	-	-	-	15	15
Repurchase of shares	-	-	(273)	-	-	(273)	-	(273)
Reclassification	-	-	-	20	(20)	-	-	-
Other	-	-	-	-	1	1	-	1
Total comprehensive income	-	-	-	203	611	814	8	822
Balance at 31 December 2016	**338**	**489**	**(339)**	**396**	**5,188**	**6,072**	**108**	**6,180**

[1] As of 2016, Actuarial gains and losses and Other retained earnings have been grouped together in Retained earnings. See also Note 16 for movements within the Actuarial gains and losses.

Consolidated cash flow statement (Note 26)

x € million		2016		2015
Operating activities				
Profit for the year		629		92
Share of the profit of associates and joint ventures		(194)		(30)
Income tax		89		68
Profit before income tax expense		524		130
Financial income and expense		133		174
Operating profit[1]		657		304
Depreciation, amortization and impairments		489		742
Earnings before interest, tax, depreciation and amortization (EBITDA)[1]		1,146		1,046
Adjustments for:				
- (Gain) or loss from disposals	(3)		(6)	
- Acquisition/divestment related in EBITDA	15		12	
- Change in provisions	20		4	
- Defined benefit plans	(27)		(60)	
	5		(50)	
Income tax received	7		4	
Income tax paid	(84)		(79)	
Settlement intercompany hedges	-		(218)	
Other	33		5	
Changes, excluding working capital		(39)		(338)
Operating cash flow before changes in working capital		**1,107**		**708**
Changes in operating working capital:				
- Inventories	(138)		45	
- Trade receivables	(115)		(65)	
- Trade payables	195		(32)	
	(58)		(52)	
Changes in other working capital	(31)		40	
Changes in working capital		(89)		(12)
Cash provided by operating activities		**1,018**		**696**

[1] Please refer to Note 2 'Alternative performance measures' for the reconciliation to Adjusted EBITDA of € 1,262 million and other adjusted IFRS performance measures

Consolidated cash flow statement (Note 26) continued

x € million	2016		2015	
Cash provided by operating activities		**1,018**		**696**
Investing activities				
Capital expenditure for:[1]				
- Intangible assets	(63)		(74)	
- Property, plant and equipment	(413)		(458)	
Payments regarding drawing rights	(19)		(11)	
Proceeds from disposal of property, plant and equipment	4		10	
Acquisition of subsidiaries and associates	4		(86)	
Cash from net investment hedge	-		(136)	
Disposal of subsidiaries, businesses and associates	80		297	
Change in fixed-term deposits	(936)		(2)	
Interest received	40		66	
Other financial assets:				
- Capital payments and acquisitions	(35)		(52)	
- Dividends received	152		144	
- Change in loans granted	(11)		27	
- Proceeds from disposals	3		-	
Cash used in investing activities		**(1,194)**		**(275)**
Financing activities				
Capital payments from / to non-controlling interests	6		1	
Loans taken up	749		1,004	
Repayment of loans	(4)		(653)	
Change in debt to credit institutions	(11)		18	
Repayment of commercial paper	(150)		(250)	
Dividend paid	(190)		(174)	
Interest paid	(151)		(303)	
Proceeds from reissued treasury shares	137		39	
Repurchase of shares	(273)		(122)	
Cash from / used in financing activities		**113**		**(440)**
Change in cash and cash equivalents		**(63)**		**(19)**
Cash and cash equivalents at 1 January		**665**		**669**
Exchange differences relating to cash held		2		15
Cash and cash equivalents at 31 December		**604**		**665**

[1] An amount of € 1 million included in capital expenditure was funded by customers (2015: € 7 million)

Notes to the consolidated financial statements of Royal DSM

1 General information

Unless stated otherwise, all amounts are in € million.

A list of DSM participations has been filed with the Chamber of Commerce (Netherlands) and is available from the company upon request. The list can also be downloaded from the company website.

The preparation of financial statements requires estimates and judgments that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of the financial statements. The policies that management considers to be the most important to the presentation of the financial condition and results of operations are discussed in the relevant Notes. The same holds for the issues that require management judgments or estimates about matters that are inherently uncertain. Management cautions that future events often vary from forecasts and that estimates routinely require adjustment. Areas of judgment that have the most significant effect on the amounts recognized in the financial statements relate to the categorization of certain items as 'APM adjustments' relating to the Alternative performance measures, the identification of cash generating units (CGUs) and the classification of activities as 'held for sale' and 'discontinued operations'.

Key assumptions and estimates that need to be made by management relate to the useful lives of non-current assets (Notes 8 and 9), the establishment of provisions for retirement and other post-employment benefits (Note 24), the recognition and measurement of income taxes (Note 7) and the determination of fair values for financial instruments (Note 23) and for share-based compensation (Note 27). Furthermore, impairment testing requires judgments by management, amongst others with respect to the determination of CGUs, growth rates and discount rates to apply (Notes 2, 8, 9 and 10). Significant judgment is also required for the determination of earn-out receivables and payables in business combinations (Note 3) and for the valuation of drawing rights (Note 8). For drawing rights, the most important judgments relate to the estimation of the required maintenance and replacement outlays. Estimates are based on historical quoted market prices, experience and assumptions that are considered reasonable under the circumstances.

Exchange rates

The currency exchange rates that were used in preparing the consolidated statements are listed below for the most important currencies.

1 euro =	Exchange rate at balance sheet date		Average exchange rate	
	2016	2015	**2016**	2015
US dollar	1.05	1.09	1.11	1.11
Swiss franc	1.07	1.08	1.09	1.07
Pound sterling	0.85	0.74	0.82	0.73
Brazilian real	3.41	4.26	3.86	3.69
Chinese renminbi	7.29	7.09	7.34	6.91

Presentation of consolidated income statement

In the consolidated income statement, the qualifying activities that were disposed of during the period or which were classified as held for sale at the end of the period are presented as discontinued operations. As a consequence of the disposal of the caprolactam, acrylonitrile and composite resins businesses, the results of these bulk chemicals businesses were presented as discontinued operations.

DSM presents expenses in the consolidated income statement in accordance with their function. This allows the presentation of gross margin on the face of the income statement, which is a widely used performance measure in the industry. The composition of the costs allocated to the individual functions is explained below.

Cost of sales encompasses all manufacturing costs (including raw materials, employee benefits, and depreciation and amortization) related to goods and services captured in net sales. They are measured at their actual cost based on FIFO, or weighted average cost.

Marketing and sales relates to the selling and marketing of goods and services, and also includes all costs that are directly related to the sale of goods, but that are not originated by the manufacturing of the goods (e.g. freight).

Research and development consists of:

- research, which is defined as original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding; and
- development, which is defined as the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.

General and administrative relates to the strategic and governance role of the general management of the company as well as the representation of DSM as a whole in the financial, political or business community. It also relates to business support activities of staff departments that are not directly related to the other functional areas.

2 Alternative performance measures (APMs)

In presenting and discussing DSM's financial position, operating results and cash flows, management uses certain alternative performance measures not defined by IFRS. These alternative performance measures should not be viewed in isolation as alternatives to the equivalent IFRS measures and should be used as supplementary information in conjunction with the most directly comparable IFRS measures. Alternative performance measures do not have standardized meaning under IFRS and therefore may not be comparable to similar measures presented by other companies.

Respectively Adjusted EBITDA, organic growth and ROCE are important measures of the group's performance and are the basis for measuring management performance. ROCE is defined as Adjusted EBIT as a percentage of weighted average capital employed. 'EBIT' is an alternative term for the IFRS performance measure 'operating profit'. Where a non-financial measure is used to calculate an operational or statistical ratio, this is also considered an APM.

For DSM, the most important APM is the application of APM adjustments to the IFRS measures to provide clear reporting on the underlying developments of the business, these APM adjustments may impact the EBIT(DA), net profit and the EPS. A reconciliation of these alternative performance measures to the most directly comparable IFRS measures can be found on page 144.

The APM adjustments to net profit, as included in the APMs, can be specified as follows:

	2016			2015		
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
APM adjustments:						
- Acquisitions / divestments	(13)	28	15	7	5	12
- Restructuring	101	-	101	102	-	102
- Other	-	-	-	10	-	10
- Impairments of PPE, intangible assets and business activities	18	-	18	92	130	222
- Adjustments to financial income and expense	-	-	-	15	-	15
- Income tax related to adjustments	(31)	-	(31)	(51)	(6)	(57)
- Adjustments to share in result associates	(212)	-	(212)	24	-	24
Total APM adjustments (income) / expense	**(137)**	**28**	**(109)**	**199**	**129**	**328**

2016

The APM adjustments in 2016 are listed below:

- Restructuring costs of € 101 million relate to project costs of the restructuring projects together with the redundancy schemes connected to the dismissal and transfer of employees and costs of termination of contracts.
- The impairments of property, plant and equipment (PPE), intangible assets, and business activities of € 18 million in total relate mainly to the impairment of PPE at DSM Engineering Plastics in the US (€ 10 million) and intangible assets at DSM Bio-based Products & Services in Brazil (€ 10 million).
- Acquisition and divestment costs of € 15 million relate to the adjustments due to various settlements relating to the divestment of DSM Fibre Intermediates and Composite Resins to ChemicalInvest of € 28 million and other acquisition-related costs (€ 4 million), offset partly by the release of an acquisition-related liability (€ 17 million).
- APM adjustments to share in result associates mainly relate to the gain of € 232 million on the IPO of Patheon N.V. and the secondary offering, partly offset by financing, reorganization and acquisition-related costs of Patheon (€ 20 million). See Note 10 for further details.

2015

The APM adjustments in 2015 are listed below:

- Acquisition and divestment costs of € 12 million mainly relate to the acquisition of Aland and Cubic Tech (€ 5 million) and divestment-related costs (€ 5 million).
- Restructuring costs of € 102 million relate to project costs of the restructuring projects together with the redundancy schemes connected to the dismissal and transfer of employees and costs of termination of contracts.
- The impairments of PPE and business activities of € 222 million relate mainly to the impairment of the DSM Fibre Intermediates and DSM Composite Resins business, divested per 31 July 2015 (€ 130 million; discontinued operations); the impairment of the DSM-AGI business (€ 26 million), of which goodwill € 16 million; an impairment of US tape line assets at DSM Dyneema (€ 19 million) and an impairment at the site of DSM Resins & Functional Materials in Stanley (North Carolina, USA) (€ 15 million). Furthermore, impairments were recognized of equipments by DSM Nutritional Products (€ 9 million) and DSM Innovation Center (€ 5 million) and of software within DSM Business Services (€ 16 million).
- APM adjustments to financial income and expense of € 15 million relate to the revaluation of monetary positions in Venezuela.
- APM adjustments to share in result associates mainly relates to financing, reorganization and acquisition-related costs of Patheon (€ 32 million), offset by the share in the gain of the divestment of Banner Life Sciences (€ 8 million).

Alternative performance measures

	2016			2015		
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Operating profit	685	(28)	657	362	(58)	304
Depreciation, amortization and impairments	489	-	489	594	148	742
EBITDA	**1,174**	**(28)**	**1,146**	**956**	**90**	**1,046**
APM adjustments to EBITDA:						
- Acquisitions / divestments	(13)	28	15	7	5	12
- Restructuring	101	-	101	102	-	102
- Other	-	-	-	10	-	10
Total APM adjustments	88	28	116	119	5	124
Adjusted EBITDA	**1,262**	**-**	**1,262**	**1,075**	**95**	**1,170**
Operating profit	**685**	**(28)**	**657**	**362**	**(58)**	**304**
APM adjustments to Operating profit:						
- APM adjustments to EBITDA	88	28	116	119	5	124
- Impairments of PPE and intangible assets	18	-	18	92	130	222
Total APM adjustments	106	28	134	211	135	346
Adjusted operating profit	**791**	**-**	**791**	**573**	**77**	**650**
Net profit (for equity holders of of Koninklijke DSM N.V.)	**649**	**(28)**	**621**	**184**	**(96)**	**88**
APM adjustments to:						
- Operating profit	106	28	134	211	135	346
- Financial income and expense	-	-	-	15	-	15
- Share in resultassociates	(212)	-	(212)	24	-	24
Income tax related to APM adjustments	(31)	-	(31)	(51)	(6)	(57)
Total APM adjustments	(137)	28	(109)	199	129	328
Adjusted net profit	**512**	**-**	**512**	**383**	**33**	**416**
Dividend on cumulative preference shares	(4)	-	(4)	(10)	-	(10)
Adjusted net profit available to holders of ordinary shares	**508**	**-**	**508**	**373**	**33**	**406**
Earnings per share						
Weighted average number of ordinary shares outstanding (x 1,000)			175,100			174,357
Effect of dilution due to share options (x 1,000)			603			624
Adjusted weighted average number of ordinary shares outstanding (x 1,000)			175,703			174,981
Earnings per share (EPS) (in €):						
- Net basic EPS	3.68	(0.16)	3.52	1.00	(0.55)	0.45
- Net diluted EPS	3.67	(0.16)	3.51	1.00	(0.55)	0.45
- Adjusted net basic EPS	2.90	-	2.90	2.14	0.19	2.33
- Adjusted net diluted EPS	2.89	-	2.89	2.13	0.19	2.32

3 Change in the scope of the consolidation

Acquisitions

2016
In order to further strengthen and integrate its Resins business, DSM agreed with joint venture partner JSR Corporation to increase its stake in Japan Fine Coatings (JFC) to 70% in the coming years. As a first step, DSM increased its shareholding from 50.0% to 50.1% in July 2016. Based on the changes in the joint venture agreement and the articles of incorporation, together with acquiring the voting rights of JFC, DSM obtained a controlling interest in JFC in July 2016. Prior to obtaining control, DSM accounted for its investment in accordance with the equity method. Revaluation of this existing 50% investment in JFC to fair value resulted in a book profit of €6 million. From the date of control, the financial statements of JFC are consolidated by DSM and reported in the Materials cluster. In accordance with IFRS 3, the purchase price of JFC was allocated to identifiable assets and liabilities acquired. Goodwill amounted to €10 million. The goodwill relates to the expected synergies from integrating JFC within DSM's existing Coating Resins business. The non-controlling interest in JFC was measured at the proportionate share of the fair value and amounted to €6 million at the acquisition date.

The consolidation of JFC contributed €18 million to net sales and €6 million to Adjusted EBITDA (€5 million to EBITDA) in 2016.

Up to one year from the acquisition date, the initial accounting for business combinations needs to be adjusted to reflect additional information that has been received about facts and circumstances that existed at the acquisition date and would have affected the measurement of amounts recognized as of that date. As a result of such adjustments, the values of assets and liabilities recognized may change in the one-year period from the acquisition date, which resulted in some adjustments to the opening balance sheet of Cubic Tech, acquired in May 2015. The Purchase Price Allocation (PPA) was finalized in the course of the year.

The impact of the acquisitions on DSM's consolidated balance sheet at the date of acquisition is shown in the following table.

Acquisitions 2016

	Japan Fine Coatings		Cubic Tech adj.			Total	
	Book value	Fair value	Book value	Fair value total	Change in fair value	Book value	Fair value
Assets							
Intangible assets	-	9	-	5	5	-	14
Property, plant and equipment	16	11	1	1	-	17	11
Other non-current assets	(4)	(4)	-	-	-	(4)	(4)
Inventories	3	4	-	-	-	3	4
Receivables	3	3	1	1	-	4	3
Cash and cash equivalents	5	5	-	-	-	5	5
Total assets	**23**	**28**	**2**	**7**	**5**	**25**	**33**
Non-controlling interests	5	6	-	-	-	5	6
Liabilities							
Non-current liabilities	-	2	-	2	2	-	4
Current liabilities	19	19	1	1	-	20	19
Total non-controlling interests and liabilities	**24**	**27**	**1**	**3**	**2**	**25**	**29**
Net assets	**(1)**	**1**	**1**	**4**	**3**	**-**	**4**
Acquisition price (in cash)		-		10	-		-
Fair value of associate contributed		10		-	-		10
Acquisition price (payable earn-out)		6		5	-		6
Consideration		**16**		**15**	**-**		**16**
Elimination book value associate		(5)		-	-		(5)
Goodwill		**10**		**11**	**(3)**		**7**
Acquisition costs recognized in APM adjustments (see Note 2)		1		-	-		1

2015

On 31 March 2015, DSM obtained control of Aland Nutraceutical Holding, Ltd., a Hong Kong-based company producing vitamin C in China, by buying 100% of the shares. Aland was founded in 1990 and is one of the leading vitamin C manufacturers in China. The company has a production facility in Jingjiang (China). From the acquisition date onwards, the financial statements of Aland have been consolidated by DSM and reported in the Nutrition segment. The acquisition strengthens and complements DSM's position as a producer of vitamin C. In accordance with IFRS 3, the purchase price of Aland had to be allocated to identifiable assets and liabilities acquired. Goodwill amounted to € 15 million. The value of goodwill and intangible assets acquired was rather limited because the principal driver for the acquisition was the ability to obtain plant and equipment and related production capacity. The acquisition of Aland contributed € 63 million to net sales and € 8 million to EBITDA in 2015. Acquisition-related costs in this respect amounted to € 5 million before tax (see Note 2 'Alternative performance measures').

On 13 May 2015, DSM Dyneema finalized the acquisition of Cubic Tech Corporation by buying 100% of the shares. This privately-owned company based in Mesa (Arizona, USA) is focused on high-end solutions in applications as diverse as racing yacht sails, equipment and apparel for sportswear, outdoor and future soldier programs as well as emergency medical equipment. From the acquisition date onwards, the financial statements of Cubic Tech have been consolidated by DSM and reported in the segment Materials. In accordance with IFRS 3, the purchase price of Cubic Tech has to be allocated to identifiable assets and liabilities acquired. The goodwill relates to buyer-specific synergies due to DSM's unique value chain proposition in ultra high molecular weight polyethylene.

Acquisitions 2015

	Aland		**Cubic Tech**		**Total**	
	Book value	Fair value	Book value	Fair value	Book value	Fair value
Assets						
Intangible assets	8	16	-	-	8	16
Property, plant and equipment	58	64	1	1	59	65
Other non-current assets	1	1	-	-	1	1
Inventories	15	16	-	-	15	16
Receivables	11	11	1	1	12	12
Cash and cash equivalents	4	4	-	-	4	4
Total assets	**97**	**112**	**2**	**2**	**99**	**114**
Liabilities						
Non-current liabilities	8	11	-	-	8	11
Current liabilities	25	25	-	1	25	26
Total liabilities	**33**	**36**	**-**	**1**	**33**	**37**
Net assets	**64**	**76**	**2**	**1**	**66**	**77**
Acquisition price (in cash)		74		10		84
Acquisition price (payable earn-out)		17		5		22
Consideration		**91**		**15**		**106**
Goodwill		**15**		**14**		**29**
Acquisition costs recognized in APM adjustments		5		-		5

Disposals

2016

In the second quarter of 2016, DSM completed the sale of certain assets and liabilities of the cultures and enzymes business of DSM Food Specialties in La Ferté (France). This business had been impaired in 2015 by € 1 million and reclassified to held for sale. The divestment was finalized for a net consideration of € 11 million with no additional book result. In view of the limited importance of the activities, they are not presented as discontinued operations. These activities were reported in the Nutrition cluster prior to disposal. The impact of the deconsolidation of these activities on the DSM consolidated financial statements is presented in the following table:

Disposals 2016

	Cultures and Enzymes France	Other	Total
Assets			
Property, plant and equipment	(7)	-	(7)
Inventories	(3)	-	(3)
Receivables	(2)	-	(2)
Total assets	**(12)**	**-**	**(12)**
Liabilities			
Current liabilities	(1)	-	(1)
Total liabilities	**(1)**	**-**	**(1)**
Net assets	**(11)**	**-**	**(11)**
Consideration	12	-	12
Transaction and other costs	(1)	-	(1)
Consideration (net of selling costs, translation differences and net debt)	**11**	**-**	**11**
Book result	**-**	**-**	**-**

In 2015, the partial divestment of DSM Fibre Intermediates and Composite Resins to ChemicaInvest was finalized. See also Disposals 2015 for more details. In 2016, following various settlements relating to this partial divestment, an amount of -€ 28 million was included in discontinued operations without any impact on the cash flow statement.

2015

In March, DSM and CVC Capital Partners announced the establishment of a partnership comprising the DSM Fibre Intermediates and DSM Composite Resins businesses. The formation of ChemicaInvest, in which DSM has a 35% shareholding, was finalized on 31 July. From 31 July onwards, both businesses are no longer consolidated by DSM. The 35% shareholding in ChemicaInvest is reported as an associate and accounted in accordance with the equity method. The result on the contribution of DSM Fibre Intermediates and DSM Composite Resins to ChemicaInvest amounted to a loss of € 130 million and was recognized in 2015. The impairment/book result and the impact of the deconsolidation of these activities on the DSM consolidated financial statements is presented in the following table:

Disposals 2015

	Bulk Chemicals	Other	Total
Assets			
Intangible assets	(15)	-	(15)
Property, plant and equipment	(818)	(3)	(821)
Other non-current assets	(65)	(2)	(67)
Inventories	(200)	(12)	(212)
Receivables	(416)	(29)	(445)
Cash and cash equivalents	(31)	(1)	(32)
Total assets	**(1,545)**	**(47)**	**(1,592)**
Non-controlling interests	(126)	-	(126)
Liabilities			
Provisions	(44)	-	(44)
Non-current liabilities	(369)	-	(369)
Current liabilities	(333)	(32)	(365)
Non-controlling interests and liabilities	**(872)**	**(32)**	**(904)**
Net assets	**(673)**	**(15)**	**(688)**
Consideration	502	21	523
Transaction and other costs	(18)	(5)	(23)
Realization cumulative translation reserves	59	(2)	57
Consideration (net of selling costs, translation differences and net debt)	**543**	**14**	**557**
Impairment / book result	**(130)**	**(1)**	**(131)**
Income tax	-	-	-
Net impairment / book result	**(130)**	**(1)**	**(131)**

The impact of disposals on the cash flow statement is presented in the following table:

	2015
Net cash provided by / used in	
- Operating activities	(112)
- Investing activities	(21)
Net change in cash and cash equivalents	**(133)**

Deconsolidation and other changes

In 2016, there were no material deconsolidations or material changes in the percentage of ownership of subsidiaries (same as in 2015).

4 Segment information

Business segments[1]

2016	Continuing operations: Nutrition	Materials	Innovation Center	Corporate[2] Activities	Elimina-tions	Total	Discon-tinued operations	Elimina-tions	Total
Financial performance									
Net sales	5,169	2,513	167	71	-	7,920	-	-	7,920
Supplies to other clusters	55	7	23	-	(85)	-	-	-	-
Supplies	5,224	2,520	190	71	(85)	7,920	-	-	7,920
Adjusted EBITDA	931	435	1	(105)	-	1,262	-	-	1,262
EBITDA	934	419	(5)	(174)	-	1,174	(28)	-	1,146
Adjusted operating profit	645	311	(24)	(141)	-	791	-	-	791
Operating profit	648	285	(38)	(210)	-	685	(28)	-	657
Depreciation and amortization	278	124	24	34	-	460	-	-	460
Impairments	8	10	9	2	-	29	-	-	29
- of which included in APM adjustments	-	10	8	-	-	18	-	-	18
Additions to provisions	4	15	3	77	-	99	-	-	99
Share of the profit of associates and joint ventures	-	7	(24)	211	-	194	-	-	194
R&D costs[3]	104	109	64	32	-	309	-	-	309
Wages, salaries and social security costs	902	332	78	309	-	1,621	-	-	1,621
Financial position									
Total assets	6,935	2,207	826	2,990	-	12,958	-	-	12,958
Total liabilities	1,857	774	84	4,063	-	6,778	-	-	6,778
Capital employed at year-end	5,537	1,807	576	(31)	-	7,889	-	-	7,889
Capital expenditure	331	106	32	16	-	485	-	-	485
Share in equity of associates and joint ventures	1	2	133	450	-	586	-	-	586
Adjusted EBITDA margin (in %)	18.0	17.3				15.9	-		15.9
Workforce									
Average in FTE	13,168	4,453	613	2,275	-	20,509	-	-	20,509
Year-end (headcount)	13,260	4,460	619	2,447	-	20,786	-	-	20,786

[1] For a description of the types of products and services of each segment please refer to the 'Review of business' in the 'Report by the Managing Board'. Supplies between segments were fairly limited and were generally executed at market-based prices.
[2] Corporate Activities also includes costs for regional holdings, corporate overhead and share-based compensation.
[3] R&D costs relate to the functional area Research and development and exclude R&D cost included in the functional areas Cost of sales and Marketing and sales as well as R&D expenditure capitalized.

Business segments[1]

2015	Continuing operations: Nutrition	Materials	Innovation Center	Corporate[2] Activities	Elimina-tions	Total	Discon-tinued operations	Elimina-tions	Total
Financial performance									
Net sales	4,963	2,528	155	76	-	7,722	1,213	-	8,935
Supplies to other clusters	56	19	3	-	(61)	17	253	(270)	-
Supplies	5,019	2,547	158	76	(61)	7,739	1,466	(270)	8,935
Adjusted EBITDA	822	384	(9)	(122)	-	1,075	95	-	1,170
EBITDA	791	379	(27)	(187)	-	956	90	-	1,046
Adjusted operating profit	535	250	(43)	(169)	-	573	77	-	650
Operating profit	495	185	(66)	(252)	-	362	(58)	-	304
Depreciation and amortization	271	133	28	43	-	475	13	-	488
Impairments	25	61	11	22	-	119	135	-	254
- of which included in APM adjustments	9	60	5	18	-	92	130	-	222
Additions to provisions	3	23	-	55	-	81	1	-	82
Share of the profit of associates and joint ventures	-	3	(18)	45	-	30	-	-	30
R&D costs[3]	123	109	70	30	-	332	8	-	340
Wages, salaries and social security costs	859	319	71	320	-	1,569	82	-	1,651
Financial position									
Total assets	6,523	2,122	809	2,289	-	11,743	-	-	11,743
Total liabilities	1,755	791	77	3,489	-	6,112	-	-	6,112
Capital employed at year-end	5,309	1,723	560	(39)	-	7,553	-	-	7,553
Capital expenditure	322	98	34	24	-	478	92	-	570
Share in equity of associates and joint ventures	1	7	135	501	-	644	-	-	644
Adjusted EBITDA margin (in %)	16.6	15.2				13.9	7.8		13.1
Workforce									
Average in FTE	13,474	4,463	625	2,065	-	20,627	1,238	-	21,865
Year-end (headcount)	12,978	4,472	630	2,716	-	20,796	-	-	20,796

1 For a description of the types of products and services of each segment please refer to the 'Review of business' in the 'Report by the Managing Board'. Supplies from DSM Fibre Intermediates to DSM Engineering Plastics were executed at cost until deconsolidation. Transfers between other segments were fairly limited and were generally executed at market-based prices.
2 Corporate Activities also includes costs for regional holdings, corporate overhead and share-based compensation.
3 R&D costs relate to the functional area Research and development and exclude R&D costs included in the functional areas Cost of sales and Marketing and sales as well as R&D expenditure capitalized.

Geographical information

2015	Continuing operations										
	The Netherlands	Rest of Western Europe	Eastern Europe	North America	Latin America	China	India	Japan	Rest of Asia	Rest of the world	Total
Net sales by origin											
In € million	1,938	2,123	154	1,451	719	837	76	73	272	79	7,722
In %	25	27	2	19	9	11	1	1	4	1	100
Net sales by destination											
In € million	280	1,851	467	1,779	1,053	937	153	209	740	253	7,722
In %	4	24	6	23	13	12	2	3	10	3	100
Workforce at year-end (headcount)	4,166	4,732	439	3,161	2,020	4,556	501	144	821	256	20,796
Average workforce (FTE)	4,017	4,589	426	3,153	2,164	4,534	516	144	832	252	20,627
Intangible assets and Property, plant and equipment											
Capital expenditure	138	121	2	102	22	84	2	-	5	2	478
Carrying amount	1,619	1,238	29	2,537	292	505	19	22	117	21	6,399
Total assets (total DSM)	3,838	2,038	119	3,486	749	882	82	95	361	93	11,743
2016											
Net sales by origin											
In € million	2,006	2,444	160	1,436	544	842	73	100	241	74	7,920
In %	25	31	2	18	7	11	1	1	3	1	100
Net sales by destination											
In € million	303	1,877	494	1,795	989	989	178	264	787	244	7,920
In %	4	25	6	23	12	12	2	3	10	3	100
Workforce at year-end (headcount)	4,026	4,715	439	3,187	2,069	4,594	475	193	828	260	20,786
Average workforce (FTE)	3,944	4,575	435	3,153	2,065	4,581	498	163	823	272	20,509
Intangible assets and Property, plant and equipment											
Capital expenditure	120	151	4	91	36	73	1	1	5	3	485
Carrying amount	1,587	1,703	31	2,104	376	523	18	42	104	25	6,513
Total assets (total DSM)	4,560	2,495	126	3,110	885	1,077	87	144	367	107	12,958

DSM has no single external customer that represents 10% or more of revenues, and therefore information about major customers is not provided.

5 Net sales and costs

Net sales

	2016	2015
Continuing operations		
Goods sold	7,724	7,532
Services rendered	188	183
Royalties from ordinary activities	8	7
Total	**7,920**	**7,722**

Total costs

In 2016, total operating costs of continuing operations amounted to €7.2 billion, €0.2 billion lower than in 2015, when these costs stood at €7.4 billion. Total operating costs in 2016 included Cost of sales amounting to €5.3 billion (2015: €5.4 billion); gross margin as a percentage of net sales stood at 34% (2015: 30%).

Employee benefits costs

	2016	2015
Continuing operations		
Wages and salaries	1,420	1,365
Social security costs	177	181
Pension costs (see also Note 24)	131	122
Share-based compensation (see also Note 27)	24	23
Total	**1,752**	**1,691**

Depreciation, amortization and impairments

	2016	2015
Continuing operations		
Amortization of intangible assets	143	153
Depreciation of property, plant and equipment	317	322
Impairment losses	29	119
Total	**489**	**594**

Other operating income

	2016	2015
Continuing operations		
Release of provisions	19	18
Gain on sale of assets and activities	6	11
Gain on scrap, waste material, emission rights, royalties and licenses sold	-	2
Insurance benefits	31	7
Amendments / settlements pension plans	18	12
Release earn-out payments	16	2
Sundry	19	34
Total	**109**	**86**

Other operating expense

	2016	2015
Continuing operations		
Additions to provisions	74	74
Loss from the disposal or closure of assets and activities	1	-
Exchange differences	1	16
Acquisitions	2	6
Sundry	11	11
Total	**89**	**107**

6 Financial income and expense

	2016	2015
Continuing operations		
Financial income		
Interest income	(23)	(10)
Financial expense		
Interest expense	121	125
Interest relating to defined benefit plans	10	11
Capitalized interest during construction	(3)	(6)
Interest charge on discounted provisions	1	8
Exchange differences	6	6
Unwinding discounted receivables / payables	7	7
Revaluation monetary positions Venezuela	-	15
Sundry	14	8
Total financial expense	**156**	**174**
Financial income and expense	**133**	**164**

In 2016, the interest rate applied in the capitalization of interest during construction was 5% (2015: 5%).

7 Income tax

The income tax expense on the total result was € 89 million, which represents an effective income tax rate of 17.0% (2015: € 68 million, representing an effective income tax rate of 52.4%) and can be broken down as follows:

	2016	2015
Current tax expense:		
- Current year	(113)	(104)
- Prior-year adjustments	(10)	1
- Tax credits compensated	3	3
- Non-recoverable withholding tax	(2)	(6)
	(122)	**(106)**
Deferred tax expense:		
- Originating from temporary differences and their reversal	79	48
- Prior-year adjustments	7	7
- Change in tax rate	(4)	(2)
- Change in tax losses and tax credits recognized	(49)	(15)
	33	**38**
Total	**(89)**	**(68)**
Of which related to:		
- Adjusted result from continuing operations	(120)	(97)
- APM adjustments	31	51
- Result from discontinued operations	-	(22)

The effective tax rate on the Adjusted result from continuing operations was 18.3% in 2016 (2015: 22.9%). This decrease was due amongst others to a more favorable geographical mix and a one-time tax settlement for the internal transfer of a business in 2015. For the strategy period 2016-2018, DSM expects the effective tax rate to be in the range of 18-20%. The relationship between the income tax rate in the Netherlands and the effective tax rate on the result is as follows:

Effective tax rate

in %	2016	2015
Domestic income tax rate	25.0	25.0
Tax effects of:		
- Deviating rates	(5.4)	7.1
- Tax-exempt income and non-deductible expense	(0.3)	(3.9)
- Other effects	(1.0)	(5.3)
Effective tax rate Adjusted result, continuing operations	**18.3**	**22.9**
Discontinued operations	(1.1)	2.5
APM adjustments (see Note 2)	(0.2)	0.9
Impairment / book result bulk chemicals	-	26.1
Total effective tax rate	**17.0**	**52.4**

Other effects mainly include an internal transfer of business (-5.5%) and a change in the recognition of tax losses (+3.6%).

The balance of deferred tax assets and deferred tax liabilities increased by € 30 million owing to the changes presented in the table below:

Deferred tax assets and liabilities

	2016	2015
Balance at 1 January		
Deferred tax assets	366	427
Deferred tax liabilities	(319)	(365)
Total	**47**	**62**
Changes:		
- Income tax expense in income statement	33	38
- Income tax expense in other comprehensive income	8	1
- Acquisitions and disposals	(3)	(49)
- Exchange differences	(12)	(16)
- Transfer	4	11
Balance at 31 December	**77**	**47**
Of which:		
- Deferred tax assets	355	366
- Deferred tax liabilities	(278)	(319)

In various countries, DSM has taken standpoints regarding its tax position which may at any time be challenged, or have already been challenged, by the tax authorities, because the authorities in question interpret the law differently. These uncertainties are taken into account in determining the probability of realization of deferred tax assets and liabilities.

The deferred tax assets and liabilities relate to the following balance sheet items:

Deferred tax assets and liabilities by balance sheet item

		2016		2015
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets	13	(209)	20	(261)
Property, plant and equipment	18	(200)	11	(214)
Financial assets	3	(1)	2	(5)
Inventories	71	(22)	54	(7)
Receivables	5	(5)	5	(6)
Equity	1	(3)	1	(3)
Other non-current liabilities	18	(1)	40	(1)
Non-current provisions	95	(6)	92	-
Non-current borrowings	-	-	-	-
Other current liabilities	95	(3)	71	(2)
	319	**(450)**	**296**	**(499)**
Tax losses carried forward	208	-	250	-
Set-off	(172)	172	(180)	180
Total	**355**	**(278)**	**366**	**(319)**

No deferred tax assets were recognized for loss carryforwards amounting to € 216 million (2015: € 121 million). Unrecognized loss carryforwards amounting to € 74 million will expire in the years up to and including 2021 (2015: € 30 million up to and including 2020), € 77 million between 2022 and 2026 (2015: € 77 million between 2021 and 2025) and the remaining € 65 million between 2027 and 2031 (2015: € 14 million between 2026 and 2030).

The valuation of deferred tax assets depends on the probability of the reversal of temporary differences and the utilization of tax loss carryforwards. Deferred tax assets are recognized for future tax benefits arising from temporary differences and for tax loss carryforwards to the extent that the tax benefits are likely to be realized. In the Netherlands, tax losses may be carried forward for nine years. For the entities in the Dutch tax consolidation, losses will start to expire in 2019. DSM has to assess the likelihood that deferred tax assets will be recovered from future taxable profits. Deferred tax assets are reduced if, and to the extent that, it is not probable that all or some portion of the deferred tax assets will be realized. In the event that actual future results differ from estimates, and depending on tax strategies that DSM may be able to implement, changes to the measurement of deferred taxes could be required, which could impact on the company's financial position and profit for the year. The recoverability of the Dutch deferred tax assets was enhanced in 2015 due to steps that were taken to structurally improve the profitability of the operations in the Netherlands.

8 Intangible assets

	Goodwill	Licenses and patents	Under construction	Development projects	Other	Total
Balance at 1 January 2015						
Cost	1,788	204	102	75	1,525	3,694
Amortization and impairment losses	-	93	-	21	713	827
Carrying amount	**1,788**	**111**	**102**	**54**	**812**	**2,867**
Changes in carrying amount:						
- Capital expenditure	-	-	31	47	7	85
- Put into operation	-	7	(35)	-	28	-
- Acquisitions	29	4	-	-	12	45
- Disposals	-	(2)	(2)	-	(11)	(15)
- Deconsolidation	-	-	-	-	334	334
- Amortization	-	(11)	-	(3)	(140)	(154)
- Impairment losses	(18)	(2)	-	(13)	(23)	(56)
- Exchange differences	67	1	4	1	44	117
- Other reclassifications	-	-	4	-	1	5
	78	**(3)**	**2**	**32**	**252**	**361**
Balance at 31 December 2015						
Cost	1,883	199	104	122	1,880	4,188
Amortization and impairment losses	17	91	-	36	816	960
Carrying amount	**1,866**	**108**	**104**	**86**	**1,064**	**3,228**
Changes in carrying amount:						
- Capital expenditure	-	1	60	1	1	63
- Put into operation	-	9	(58)	27	22	-
- Acquisitions	7	5	-	-	9	21
- Amortization	-	(14)	-	(5)	(124)	(143)
- Decreased drawing rights obligation	-	-	-	-	(88)	(88)
- Impairment losses	-	(9)	-	(6)	(1)	(16)
- Exchange differences	85	3	1	-	30	119
- Other reclassifications	-	1	(2)	(3)	8	4
	92	**(4)**	**1**	**14**	**(143)**	**(40)**
Balance at 31 December 2016						
Cost	1,977	215	105	133	1,748	4,178
Amortization and impairment losses	19	111	-	33	827	990
Carrying amount	**1,958**	**104**	**105**	**100**	**921**	**3,188**

Other intangible assets include drawing rights contracts with the partnership ChemicalInvest (included under deconsolidation of € 334 million in 2015). ChemicalInvest will continue to supply at least 80% of DSM Engineering Plastics' caprolactam needs in Europe and North America for 15 years (2015-2030) via a drawing rights contract, effectively maintaining DSM Engineering Plastics' backward integration. Initially the fair value of this contract has been recognized as an intangible asset by DSM Engineering Plastics; for subsequent measurement, the initial fair value is the deemed cost of the asset, which is subject to straight-line amortization. At the end of 2016, it had a carrying amount of € 220 million (2015: € 325 million), and an amount of € 74 million was still payable to ChemicalInvest for the acquisition of the drawing rights (2015: € 160 million). The decrease in the carrying amount is mainly caused by the lower obligation of € 88 million due to the renewed contract in the US and the revised investment obligation in Europe.

The non-current liability for drawing rights was similarly updated. Furthermore, acquisition-related intangibles are included that have been included in the annual goodwill impairment test discussed later in this section. These assets are amortized on a straight-line basis, except for the intangible assets with an indefinite useful life, which amount to € 52 million (2015: € 50 million).

In 2016, an impairment on Intangible assets of € 16 million was recognized. This mainly related to an impairment of € 10 million at DSM Bio-based Products & Services in Brazil (see Note 2 'Alternative performance measures').

In 2015, an impairment on Intangible assets of € 56 million was recognized. This mainly related to an impairment of € 16 million at DSM Resins & Functional Materials against goodwill relating to DSM-AGI (see Note 2 'Alternative performance measures'). Furthermore, an impairment of development costs in DSM Nutritional Products of € 13 million had been included as certain new production techniques that had been developed were not taken into operation. Also an impairment of € 14 million was included relating to software, as a consequence of outsourcing the related activity.

Over the past few years, DSM has acquired several entities in business combinations that have been accounted for by the acquisition method, resulting in recognition of goodwill and other intangible assets. The amounts assigned to the acquired assets and liabilities are based on assumptions and estimates about their fair values. In making these estimates, management consults independent, qualified appraisers if appropriate. A change in assumptions and estimates could change the values allocated to certain assets and their estimated useful lives, which could affect the amount or timing of charges to the income statement, such as amortization of intangible assets.

The breakdown of the carrying amount of goodwill at year-end 2016 is as follows:

Goodwill

Acquisition	2016	2015	Cash generating unit	Functional Currency	Year of acquisition
Martek	444	425	DSM Nutritional Products	USD	2011
NeoResins	358	358	DSM Resins & Functional Materials	EUR	2005
Fortitech	333	318	DSM Nutritional Products	USD	2012
Ocean Nutrition Canada	210	196	DSM Nutritional Products	CAD	2012
Kensey Nash	155	148	DSM Biomedical	USD	2012
Tortuga	118	94	DSM Nutritional Products	BRL	2013
The Polymer Technology Group	84	80	DSM Biomedical	USD	2008
Pentapharm	36	36	DSM Nutritional Products	CHF	2007
Cargill Cultures and enzymes business	30	30	DSM Food Specialties	EUR/USD	2012
Shandong ICD	26	27	DSM Dyneema	CNY	2011
Unitech	18	17	DSM Nutritional Products	NZD	2013
Aland	14	14	DSM Nutritional Products	CNY	2015
Novamid	14	9	DSM Engineering Plastics	JPY	2010
Syntech Far East	13	12	DSM Resins & Functional Materials	HKD	2005
Cubic Tech	12	15	DSM Dyneema	USD	2015
Zhejiang Zhongken Biotechnology	11	11	DSM Food Specialties	CNY	2010
Verenium	11	10	DSM Food Specialties	USD	2012
Japan Fine Coatings	10	-	DSM Resins & Functional Materials	JPY	2016
C5 Yeast Company	9	9	DSM Bio-based Products & Services	EUR	2011
Crina	9	9	DSM Nutritional Products	CHF	2006
DSM Japan Engineering Plastics	6	6	DSM Engineering Plastics	EUR	2003
DSM Valley Research	6	6	DSM Food Specialties	USD	2008
Other acquisitions	31	36			
Total	**1,958**	**1,866**			

Goodwill per Cash generating unit

Cash generating unit	2016	2015
DSM Nutritional Products	1,198	1,125
DSM Resins & Functional Materials	386	375
DSM Biomedical	238	228
DSM Food Specialties	64	63
DSM Dyneema	44	47
DSM Engineering Plastics	16	16
DSM Bio-based Products & Services	9	9
DSM Advanced Solar	3	3
Total	**1,958**	**1,866**

For DSM Nutritional Products the growth assumptions are based on the growth of the global food and feed markets, for DSM Resins & Functional Materials on the demand for advanced coating resins (influenced by growth in building and construction markets) and for DSM Biomedical on the growth of the market for medical devices. For both DSM Nutrional Products (2016 pre-tax discount rate 8.6%, 2015: 7.8%) and DSM Resins & Functional Materials (2016 pre-tax discount rate 11.2%, 2015: 11.1%) the organic sales growth for the first 5 years is expected to be between 3-5%. For the subsequent 5 year period, a declining growth rate of 2.4% for DSM Nutritional Products and 1.2% for DSM Resins & Functional Materials was applied. A sensitivity test was performed on the impairment tests of the CGUs and showed that the conclusions of these tests would not have been different if reasonable possible adverse change in key parameters had been assumed, with the exception of DSM Biomedical.

The annual impairment tests of goodwill are performed in the fourth quarter. The recoverable amount of the cash generating units (CGUs) concerned is based on a value-in-use calculation. DSM Nutritional Products, DSM Resins & Functional Materials and DSM Biomedical are the three CGUs to which significant amounts of goodwill is allocated.

The cash flow projections for the first 5 years are derived from DSM's business plan (Corporate Strategy Dialogue) as adopted by the Managing Board. For the subsequent 5 years a gradual declining growth is applied for mature businesses to come to a terminal value after 10 years. The terminal value growth rate is determined with the assumption of limited inflationary growth of 1% (2015: 1%). For emerging businesses an explicit forecast period of 10 years is used with the same assumption for growth in the terminal value. The key assumptions in the cash flow projections relate to the market growth for the CGUs and the related revenue projections, EBITDA developments, and the rates used for discounting cash flows.

The goodwill allocated to DSM Biomedical (2016 pre-tax discount rate 10.5%, 2015 10.5%) amounted to €238 million and, similar to last year, the headroom is limited. The key assumptions determining the value in use are a compounded annual sales growth rate of 7.7% (2015: >10%) for the 10-year forecast period, an expected average EBITDA margin of 25% (2015: 18%) for the first 5 years and 34% (2015: 25%) for the remainder of the forecast period (due to better coverage of R&D spend). The terminal value growth rate was set at 1% (2015: 1%). A sensitivity test shows that an increase in the pre-tax weighted average cost of capital of 152.5 basis points in combination with the same decrease in the EBITDA margin over the full forecast period would result in no headroom.

The market capitalization of DSM at 31 December 2016 amounted to € 10,334 million (31 December 2015: € 8,396 million) and was clearly above the carrying amount of net assets, providing an additional indication that goodwill was not impaired.

Other intangible assets

	2016				2015
	Cost	Amortization	Carrying amount	Of which acquisition-related	Of which acquisition-related
Application software	170	(113)	57	11	12
Marketing-related	69	(15)	54	54	60
Customer-related	522	(185)	337	275	296
Technology-based	680	(457)	223	188	184
Drawing rights	245	(25)	220	-	-
Other	62	(32)	30	12	15
Total	**1,748**	**(827)**	**921**	**540**	**567**
Total 2015	1,880	(816)	1,064	567	

9 Property, plant and equipment

	Land and buildings	Plant and machinery	Other equip-ment	Under construc-tion	Not used for operating activities	Total
Balance at 1 January 2015						
Cost	2,155	5,097	234	669	20	8,175
Depreciation and impairment losses	925	3,293	160	110	14	4,502
Carrying amount	**1,230**	**1,804**	**74**	**559**	**6**	**3,673**
Changes in carrying amount:						
- Capital expenditure	3	31	3	448	-	485
- Put into operation	69	238	15	(322)	-	-
- Acquisitions	32	28	4	1	-	65
- Disposals	(108)	(418)	(10)	(157)	2	(691)
- Depreciation	(74)	(238)	(20)	-	(2)	(334)
- Impairment losses	(12)	(185)	(2)	-	-	(199)
- Impairment reversals	1	-	-	-	-	1
- Exchange differences	53	112	1	17	-	183
- Reclassification to/from held for sale	(5)	(2)	-	-	-	(7)
- Other reclassifications	(3)	(3)	1	-	-	(5)
	(44)	**(437)**	**(8)**	**(13)**	**-**	**(502)**
Balance at 31 December 2015						
Cost	2,013	3,825	206	547	15	6,606
Depreciation and impairment losses	827	2,458	140	1	9	3,435
Carrying amount	**1,186**	**1,367**	**66**	**546**	**6**	**3,171**
Changes in carrying amount:						
- Capital expenditure	2	26	4	390	-	422
- Put into operation	110	315	14	(439)	-	-
- Acquisitions	10	1	-	-	-	11
- Disposals	(2)	-	-	-	-	(2)
- Depreciation	(73)	(226)	(18)	-	-	(317)
- Impairment losses	-	(15)	-	-	-	(15)
- Impairment reversals	-	2	-	-	-	2
- Exchange differences	28	11	2	13	-	54
- Other reclassification	-	-	(2)	(3)	1	(4)
- Other changes	(2)	6	-	-	(1)	3
	73	**120**	**-**	**(39)**	**-**	**154**
Balance at 31 December 2016						
Cost	2,138	4,176	220	508	15	7,057
Depreciation and impairment losses	879	2,689	154	1	9	3,732
Carrying amount	**1,259**	**1,487**	**66**	**507**	**6**	**3,325**

There were no material finance lease agreements in 2016 (as was the case in 2015).

In 2016, impairment losses of € 15 million were recognized on Property, plant and equipment (PPE). This mainly related to the impairment of PPE at DSM Engineering Plastics in the US (€ 10 million).

In 2015, impairment losses on PPE of € 198 million were recognized. This included an impairment of € 130 million relating to the disposal of Bulk Chemicals (see Note 3 'Change in the scope of consolidation'). Furthermore this included a € 19 million impairment of a DSM Dyneema tape production line in the US, primarily used for vehicle protection. At DSM Resins & Functional Materials an impairment of € 15 million was taken relating to the factory in Stanley (North Carolina, USA) and € 10 million to PPE of DSM-AGI (see also Note 2 'Alternative performance measures').

10 Associates and joint ventures

The interests in POET-DSM Advanced Biofuels and DSM Sinochem Pharmaceuticals are classified as joint ventures in accordance with IFRS 11 and accounted for using the equity method. DSM had a 49% interest and significant influence in Patheon as of the formation of this company early in 2014; this decreased to 33.5% at the end of July 2016, following a successful IPO and secondary offering. DSM has had a 35% interest and significant influence in ChemicalInvest since the formation of this partnership in July 2015. DSM accounts for these interests using the equity method. Relations with these joint ventures and associates and their strategic importance are discussed in more detail in sections 'Innovation Center' and 'Partnerships' in the Report by the Managing Board. No entities meeting the IFRS 11 definition of joint operations were identified.

DSM's share in its most important associates and joint ventures is disclosed below:

Company		DSM interest	
		2016	2015
DSM Sinochem Pharmaceuticals, Ltd. (Hong Kong, China)	joint control	50%	50%
POET-DSM Advanced Biofuels LLC (Sioux Falls, South Dakota, USA)	joint control	50%	50%
Patheon N.V. (Amsterdam, Netherlands)	significant influence	33.5%	48.9%
ChemicalInvest Holding B.V. (Sittard-Geleen, Netherlands)	significant influence	35%	35%

The following tables provide an overview of DSM's investments in associates and joint ventures, the bridge between ‘Profit for the year’ of the associates as shown in this Note, and the lines ‘Share of the profit of associates and joint ventures’ and ‘Other results related to associates and joint ventures’ in the Consolidated income statement.

Associates and joint ventures

	2016						2015
	Patheon Group	DSP	Chemica-Invest	POET-DSM	Other[1]	Total	
Balance at 1 January	**351**	**142**	**162**	**166**	**51**	**872**	**762**
Changes:							
- Share in results	(15)	6	(9)	(24)	(5)	(47)	23
- Capital payments	-	-	5	16	12	33	51
- Dividend / capital repayments	(150)	-	-	-	(2)	(152)	(175)
- New loans	-	-	27	-	4	31	166
- Disposals	128	-	-	-	-	128	(27)
- Consolidation changes	-	-	-	-	(10)[2]	(10)	18
- Transfers	(28)	-	1	-	(8)	(35)	(6)
- Exchange differences	12	(3)	2	7	2	20	45
- Other	4	(3)	-	-	(2)	(1)	15
Total changes	**(49)**	**-**	**26**	**(1)**	**(9)**	**(33)**	**110**
Balance at 31 December	**302**	**142**	**188**	**165**	**42**	**839**	**872**
Of which carrying amount of the investment	302	130	-	117	37	586	644
Of which loans granted	-	12	188	48	5	253	228

[1] Among others Actamax, Africa Improved Foods and Limburg Ventures are included in Other
[2] Relates to Japan Fine Coatings

Profit of associates and joint ventures

	2016						2015
	Patheon Group	DSP	Chemica-Invest	POET-DSM	Other	Total	
Profit for the year (100%)	(43)	14	(83)	(48)			
Non-controlling interest	18	(1)	-	-			
Net profit shareholders (100%)	(25)	13	(83)	(48)			
DSM's %-share in capital	33.5%[1]	50%	35%	50%			
Share in result based upon %-share	(15)	6	(29)	(24)	(5)	(67)	23
Share in losses in excess of investment	-	-	20	-	-	20	-
Share in result of associates and joint ventures	(15)	6	(9)	(24)	(5)	(47)	23
Tax	-	-	-	8	1	9	7
Share in result associates and JVs	**(15)**	**6**	**(9)**	**(16)**	**(4)**	**(38)**	**30**
Book profit IPO/secondary offering Patheon	232	-	-	-	-	232	-
Total result related to associates and JVs	**217**	**6**	**(9)**	**(16)**	**(4)**	**194**	**30**

[1] DSM's share decreased from 49% to 33.5% during 2016

Loans include a € 58 million shareholder loan with an annual fixed interest rate of 9.875% and € 130 million bridge loans with an annually rising interest rate from 7 to 10%, both with an expected 4-year maturity, granted to ChemicalInvest; a loan of € 12 million to DSP maturing in 2018; a USD 50 million loan to POET-DSM with a 5% interest rate repayable in 2018 and secured for 50% by a guarantee from the joint venture partner POET LLC.

Patheon is included from 1 November 2014 until the end of fiscal year 2015 (31 October) for 2015 and from 1 November 2015 until 31 October 2016 for 2016.

Transfers at Patheon of € 28 million relates to an earn-out contract, which has been recognized within Other non-current receivables (see Note 11).

ChemicalInvest is included from 31 July 2015. The net result in 2016 is significantly impacted by the wind-down of Fibrant caprolactam operations in the US, leading to a loss of € 83 million and an equity value of -€ 74 million. DSM decreased its carrying amount in this associate to zero and will not recognize any further losses on its investment in the associate, as DSM has no obligation to fund beyond its net interest in ChemicalInvest.

The POET-DSM Advanced Biofuels joint venture has a commercial-scale production facility for cellulosic bio-ethanol in Emmetsburg (Iowa, USA). It processes corn-crop residues through a bioconversion process using enzymatic hydrolysis followed by fermentation. Work in 2016 focused on bringing the plant to continuous production and toward full capacity and progress was made during the year on addressing the pretreatment issues.

At year-end, the total assets of POET-DSM amounted to € 293 million (2015: € 292 million) on a 100% basis. DSM tested the POET-DSM investment for impairment based on cash flow projections of the ten-year plan. The key assumptions used in the projection are that revenue and margin assume that the start-up delays of the POET-DSM factory will be resolved and that the factory realizes full capacity in 2019 in order to produce the projected volumes against the projected costs. The projected production volumes and related variable costs include further efficiency improvements. Furthermore, the expected market price for bio-ethanol is based on current grain ethanol pricing as well as the continuation of the US Renewable Fuel Standard subsidy program for bio-ethanol after 2022. The terminal value growth rate was set at 1.5% (2015: 1.5%). A sensitivity test for the development of the market price for bio-ethanol – as well as the pre-tax weighted average cost of capital – demonstrates that a decrease of more than 10% in the market price of bio-ethanol or an increase of more than 100 basis points on the pre-tax weighted average costs of capital will result in an impairment.

The table on the next page gives an overview of associates and joint ventures (on a 100% basis).

Associates and joint ventures on a 100% basis

	Patheon N.V.		DSP		ChemicalInvest[2]		Other		Total	
	2016	2015[1]	**2016**	2015	**2016**	2015	**2016**	2015	**2016**	2015
Assets										
Intangible assets	1,379	1,351	26	22	107	9	8	11	1,520	1,393
Property, plant and equipment	988	863	219	234	270	545	366	349	1,843	1,991
Other non-current assets	391	473	28	30	137	166	24	4	580	673
Inventories	378	340	82	81	112	171	23	14	595	606
Receivables	413	348	142	142	366	376	16	25	937	891
Cash and cash equivalents	158	567	92	102	158	107	96	33	504	809
Other current assets	-	-	-	-	-	7	-	10	-	17
Total assets	**3,707**	**3,942**	**589**	**611**	**1,150**	**1,381**	**533**	**446**	**5,979**	**6,380**
Liabilities										
Provisions (non-current)	125	-	1	1	68	1	8	-	202	2
Borrowings (non-current)	2,009	2,422	15	46	561	534	93	80	2,678	3,082
Other non-current liabilities	237	339	9	10	127	295	2	6	375	650
Provisions (current)	7	23	-	-	87	3	-	-	94	26
Borrowings and financial derivatives (current)	21	26	144	127	78	82	14	21	257	256
Other current liabilities	523	513	154	165	303	366	47	27	1,027	1,071
Total liabilities	**2,922**	**3,323**	**323**	**349**	**1,224**	**1,281**	**164**	**134**	**4,633**	**5,087**
Net assets (100% basis)	**785**	**619**	**266**	**262**	**(74)**	**100**	**369**	**312**	**1,346**	**1,293**
Of which non-controlling interest	-	62	(5)	4	3	94	-	-	(2)	160
Net assets excluding goodwill	785	619	266	262	(74)	100	369	312	1,346	1,293
Contingent liabilities	25	20	5	5	54	45	-	-	84	70
Summarized statement of profit or loss										
Revenue (net sales)[3]	1,786	1,621	431	418	1,802	756	45	214	4,064	3,009
Operating profit (EBIT)	**125**	**173**	**34**	**28**	**(37)**	**(32)**	**(72)**	**(42)**	**50**	**127**
Financial income	-	-	1	1	1	-	-	-	2	1
Financial expense	(159)	(123)	(12)	(7)	(52)	(22)	(7)	(3)	(230)	(155)
Share of the profit of associates	(3)	(2)	-	-	6	4	1	-	4	2
Profit before income tax expense	**(37)**	**48**	**23**	**22**	**(82)**	**(50)**	**(78)**	**(45)**	**(174)**	**(25)**
Income tax expense	27	(8)	(9)	(6)	(1)	10	(24)	(4)	(7)	(8)
Profit for the year (continuing operations)	**(10)**	**40**	**14**	**16**	**(83)**	**(40)**	**(102)**	**(49)**	**(181)**	**(33)**
Post-tax result discontinued operations	(3)	93	-	-	-	-	5	-	2	93
Profit for the year (total)	**(13)**	**133**	**14**	**16**	**(83)**	**(40)**	**(97)**	**(49)**	**(179)**	**60**
Other comprehensive income	-	2	-	-	-	-	-	-	-	2
Total comprehensive income	**(13)**	**135**	**14**	**16**	**(83)**	**(40)**	**(97)**	**(49)**	**(179)**	**62**
of which non-controlling interest	-	20	(1)	-	-	-	(18)	-	(19)	20
Adjusted EBITDA	**364**	**366**	**62**	**57**	**105**	**(3)**	**(49)**	**(31)**	**482**	**389**
EBITDA	**290**	**348**	**62**	**57**	**23**	**(3)**	**(49)**	**(31)**	**326**	**371**
Depreciation, amortization and impairment	(165)	(175)	(28)	(29)	(60)	(29)	(23)	(11)	(276)	(244)

[1] Including Banner Life Sciences
[2] ChemicalInvest updated the initial recognition of assets and liabilities acquired on the basis of a purchase price allocation in 2016
[3] Excluding sales to DSM by DSP of €8 million (2015: €10 million) and ChemicalInvest of €328 million (2015: €123 million)

Following an IPO at Patheon N.V. and a secondary offering of 4,761,905 ordinary shares, DSM's share in Patheon decreased from 48.8% to 33.5%. As a consequence, DSM realized a profit of € 232 million. The cash flow impact of this transaction for DSM is € 219 million and consists of the proceeds of the secondary offering of € 85 million and a dividend relating to the IPO of € 134 million, both included under Cash flow from investing activities in the Cash flow statement.

IPO/Secondary offering Patheon

	Share DSM	Value DSM	Result DSM
Book value pre-IPO	48.8%	128	
Dilution DSM's share due to the IPO	(12.0%)	159	159
Book value after IPO	36.8%	287	
Net proceeds secondary offering			85
Shares/book value divested in secondary offering	(3.3%)	(26)	(26)
Related costs		(5)	(5)
Book value after secondary offering	33.5%	256	
Proportionate release of translation reserve			19
Total result of IPO/secondary offering Patheon			**232**

11 Other financial assets

	Loans associates and joint ventures	Other participations	Other receivables	Other deferred items	Total
Balance at 1 January 2015	**145**	**44**	**45**	**41**	**275**
Changes:					
- Charged to the income statement	-	(8)	16	-	8
- Capital payments	-	2	-	-	2
- Disposals	-	-	56	-	56
- Loans granted	166	-	2	-	168
- Repayments	(32)	-	(2)	-	(34)
- Consolidation changes	-	4	-	-	4
- Exchange differences	11	1	(3)	2	11
- Transfers	(22)	-	(1)	-	(23)
- Changes in fair value	-	5	-	-	5
- Other	(40)	3	-	(16)	(53)
Balance at 31 December 2015	**228**	**51**	**113**	**27**	**419**
Changes:					
- Charged to the income statement	-	(9)	3	(6)	(12)
- Capital payments	-	3	-	-	3
- Disposals	-	(3)	2	-	(1)
- Loans granted	31	-	-	-	31
- Repayments	-	-	(4)	2	(2)
- Consolidation changes	-	-	-	-	-
- Exchange differences	3	-	5	1	9
- Transfers	(8)	-	33	(2)	23
- Changes in fair value	-	7	-	-	7
- Other	(1)	1	(16)	2	(14)
Balance at 31 December 2016	**253**	**50**	**136**	**24**	**463**

For Loans associates and joint ventures, see Note 10 'Associates and joint ventures'.

Other participations relate to equity instruments in companies whose activities support DSM's business and which can be quoted or unquoted. An amount of €26 million included in Other participations relates to equity instruments, with a fair value that cannot be measured reliably (2015: €32 million). These instruments are therefore measured at cost.

Disposals in 2015 of €56 million relate mainly to the deconsolidation of the bulk chemicals business and the related earn-out receivable.

Transfers include the earn-out of Patheon of €28 million (see Note 10 'Associates and joint ventures').

Other includes €16 million decrease due to divestment settlements (see Note 3 'Changes in the scope of the consolidation' at disposals).

12 Inventories

	2016	2015
Raw materials and consumables	504	448
Intermediates and finished goods	1,359	1,227
	1,863	**1,675**
Adjustments to lower net realizable value	(63)	(48)
Total	**1,800**	**1,627**

The carrying amount of inventories adjusted to net realizable value (before reclassification to held for sale) was € 240 million (2015: € 172 million).

At the end of 2016 there were no inventories reclassified to held for sale (2015: € 2 million).

Changes in the adjustment to net realizable value

	2016	2015
Balance at 1 January	**(48)**	**(56)**
Additions charged to income statement	(101)	(71)
Utilization / reversals	86	73
Exchange differences	-	(3)
Reclassification to held for sale	-	-
Disposals	-	9
Balance at 31 December	**(63)**	**(48)**

13 Current receivables

	2016	2015
Trade receivables		
Trade accounts receivable	1,490	1,312
Deferred items	24	30
Receivables from associates	15	24
	1,529	**1,366**
Adjustment for bad debts	(25)	(17)
Total Trade receivables	**1,504**	**1,349**
Income tax receivable	**62**	**71**
Other current receivables		
Other taxes and social security contributions	31	22
Loans	25	32
Receivables from joint venture partners	3	9
Interest	-	1
Receivables associates and joint ventures relating to cash facility	17	36
Other receivables	9	32
Deferred items	2	4
Total Other current receivables	**87**	**136**

Deferred items comprised € 26 million (2015: € 34 million) in prepaid expenses that will impact profit or loss in future periods.

With respect to trade accounts receivable that are neither impaired nor past due, there are no indications that the debtors will not meet their payment obligations. An aging overview of trade receivables related to commercial transactions amounting to € 1,343 million (2015: € 1,177 million) is provided below. The remaining balance reported as trade receivables amounting to € 146 million (2015: € 135 million) is excluded from this analysis because it principally concerns reclaimable VAT and accruals that are not related to the payment behavior of customers.

Aging overview Trade receivables

in %	2016	2015
Neither past due nor impaired	82	87
1-29 days overdue	12	9
30-89 days overdue	3	2
90 days or more overdue	3	2

The changes in the allowance for doubtful accounts receivable are as follows:

	2016	2015
Balance at 1 January	**(17)**	**(18)**
Additions charged to income statement	(12)	(10)
Deductions	5	6
Disposals	-	5
Exchange differences	(1)	-
Balance at 31 December	**(25)**	**(17)**

14 Current investments

	2016	2015
Fixed term deposits	944	9
Total	**944**	**9**

All fixed term deposits have been placed with institutions with a high credit rating in line with the policy as outlined in Note 23 'Financial instruments and risks'. The deposits earn interest relative to the fixed term.

The increase is mainly due to the launch of a €750 million bond in September 2016 to lock in low interest rates taking into account the maturing of a €750 million bond in 2017.

15 Cash and cash equivalents

	2016	2015
Deposits	33	27
Cash at bank and in hand	556	615
Payments in transit	10	19
Bills of exchange	5	4
Total	**604**	**665**

Cash at year-end 2016 was used as collateral and therefore restricted for an amount of €1 million (2015: zero). In a few countries DSM faces cross-border foreign exchange controls and/or other legal restrictions that limit its ability to make these balances available on short notice for general use by the group. The amount of cash held in these countries was €109 million (2015: €109 million). The cash will generally be invested or held in the relevant country and, given the other capital resources available to the group, does not significantly affect the ability of the group to meet its cash obligations.

Cash held by DSM includes cash from certain associates and joint ventures that continue to participate in the cash-pooling arrangements of DSM. At the end of 2016, the amount had decreased by €75 million to €62 million. This applies, among others, to the former DSM-entities DSM Fibre Intermediates and DSM Composite Resins as well as DSM Sinochem Pharmaceuticals. See also Note 21 'Current liabilities'.

16 Equity

	2016	2015
Balance at 1 January	**5,631**	**5,936**
Net profit	629	92
Net exchange differences	197	30
Net actuarial gains/(losses) on defined benefit obligations	(9)	(54)
Dividend	(301)	(310)
Proceeds from reissue of ordinary shares	253	176
Repurchase of shares	(273)	(122)
Disposals	-	(126)
Other changes	53	9
Balance at 31 December	**6,180**	**5,631**

Disposals in 2015 relates to the derecognition of the non-controlling interest in the bulk chemicals activities, see Note 17 'Non-controlling interests'.

After the balance sheet date, the following dividends were declared by the Managing Board:

Dividend

	2016	2015
Per cumulative preference share A: € 0.09 (2015: € 0.23)	4	10
Per ordinary share: € 1.75 (2015: € 1.65)	306	288
Total	**310**	**298**

The proposed final dividend on ordinary shares is subject to approval by the Annual General Meeting of Shareholders and has not been deducted from Equity.

For a description of the rules of profit appropriation and of the statutory rights attached to preference shares B, see page 197.

Share capital

On 31 December 2016, the authorized capital amounted to € 1,125 million (2015: € 1,125 million), distributed over 330,960,000 ordinary shares, 44,040,000 cumulative preference shares A and 375,000,000 cumulative preference shares B. All shares have a nominal value of € 1.50 each.

The changes in the number of issued and outstanding shares in 2015 and 2016 are shown in the following table.

Overview of shares

	Issued shares		Treasury shares
	Ordinary	Cumprefs A	Ordinary
Balance at 1 January 2015	**181,425,000**	**44,040,000**	7,888,185
Reissue of shares in connection with share-based payments			(1,056,880)
Repurchase of shares			2,300,000
Dividend in the form of ordinary shares			(2,629,332)
Balance at 31 December 2015	181,425,000	44,040,000	6,501,973
Number of treasury shares at 31 December 2015	(6,501,973)	-	
Number of shares outstanding at 31 December 2015	**174,923,027**	**44,040,000**	
Balance at 1 January 2016	**181,425,000**	**44,040,000**	6,501,973
Reissue of shares in connection with share-based payments			(3,243,102)
Repurchase of shares			5,200,000
Dividend in the form of ordinary shares			(2,035,537)
Balance at 31 December 2016	181,425,000	44,040,000	6,423,334
Number of treasury shares at 31 December 2016	(6,423,334)	-	
Number of shares outstanding at 31 December 2016	**175,001,666**	**44,040,000**	

The average number of ordinary shares outstanding in 2016 was 175,099,827 (2015: 174,357,139). All shares issued are fully paid.

The cumulative preference shares A have been classified as equity because there is no mandatory redemption and distributions to the shareholders are at the discretion of DSM.

On 31 December 2016, no cumulative preference shares B were outstanding.

Share premium

Of the total share premium of € 489 million (2015: € 489 million), an amount of € 104 million (2015: € 106 million) can be regarded as entirely free of tax.

Treasury shares

On 31 December 2016, DSM possessed 6,423,334 ordinary shares (nominal value € 10 million, 2.85% of the share capital). The average purchase price of the ordinary treasury shares was € 52.77. As at 31 December 2016, 6,044,486 of the total number of treasury shares outstanding were held for servicing management and personnel share-option rights. The remainder, 378,848 shares, is the balance of shares that were purchased under the company's share buy-back program in 2007, 2008 and 2016 and shares that were reissued as stock dividend in the years 2011 through 2016.

On 31 December 2015, DSM possessed 6,501,973 ordinary shares (nominal value € 10 million, 2.9% of the share capital). The average purchase price of the ordinary treasury shares was € 49.05. As at 31 December 2015, 5,087,588 of the total number of treasury shares outstanding were held for servicing management and personnel share-option rights. The remainder, 1,414,385 shares, is the balance of shares that were purchased under the company's share buy-back program in 2007 and 2008 and shares that were reissued as stock dividend in the years 2011 through 2015.

Other reserves in Shareholders' equity

	Translation reserve	Hedging reserve	Reserve for share-based compensation	Fair value reserve	Total
Balance at 1 January 2015	**298**	**(170)**	**49**	**(11)**	**166**
Changes:					
Fair-value changes of derivatives	-	(51)	-	-	**(51)**
Release to income statement	(59)	51	-	-	**(8)**
Release to retained earnings	(7)	-	-	-	**(7)**
Reclassification to deferred items	-	(4)	-	-	**(4)**
Fair-value changes of other financial assets	-	-	-	8	**8**
Exchange differences	57	-	-	-	**57**
Options and performance shares granted	-	-	29	-	**29**
Options and performance shares exercised/cancelled	-	-	(15)	-	**(15)**
Income tax	25	(29)	-	-	**(4)**
Total changes	16	(33)	14	8	**5**
Balance at 31 December 2015	**314**	**(203)**	**63**	**(3)**	**171**
Changes:					
Fair-value changes of derivatives	-	(52)	-	-	**(52)**
Release to income statement	(19)	52	-	-	**33**
Release to deferred items	-	(4)	-	-	**(4)**
Fair-value changes of other financial assets	-	-	-	7	**7**
Exchange differences	216	-	-	-	**216**
Options and performance shares granted	-	-	32	-	**32**
Options and performance shares exercised/cancelled	-	-	(30)	-	**(30)**
Reclassification[1]	18	(2)	-	4	**20**
Income tax	1	2	-	-	**3**
Total changes	216	(4)	2	11	**225**
Balance at 31 December 2016	**530**	**(207)**	**65**	**8**	**396**

[1] Reclassification to retained earnings

The increase in the Translation reserve in 2016 is mainly caused by strengthening of the US dollar and the Brazilian real compared to the euro. As a consequence the value of the subsidiaries in those countries increased, which led to a positive exchange difference of €216 million. This is offset by the €19 million release of the cumulative translation reserve at Patheon to the income statement following the IPO and secondary offering.

The increase in the Translation reserve in 2015 is mainly caused by strengthening of the US dollar, Chinese renminbi and Swiss franc compared to the euro, which led to a positive exchange difference impact of €57 million. This is offset by the €59 million release of the cumulative translation reserve at the Bulk Chemical entities to the income statement upon their disposal.

The Translation reserve, Hedging reserve and the Fair value reserve are legal reserves in accordance with Dutch law and cannot be distributed to shareholders. Additional information is provided in Note 7 to the 'Parent company financial statements'.

17 Non-controlling interests

	2016			2015
	Andre Pectin	Other	Total	Total
% of non-controlling interest	71%			
Balance at 1 January	**56**	**34**	**90**	213
Changes:				
- Share of profit/charged to income statement	9	(1)	8	4
- Acquisitions	-	6	6	-
- Capital payments	-	9	9	1
- Dividend paid	-	(5)	(5)	(13)
- Disposals	-	-	-	(126)
- Consolidation changes	-	-	-	(2)
- Exchange differences	(1)	1	-	14
- Other	-	-	-	(1)
Total changes	8	10	18	(123)
Balance at 31 December	**64**	**44**	**108**	90

Not fully-owned subsidiaries on a 100% basis

	Andre Pectin		Other	
	2016	2015	**2016**	2015[1]
Assets				
Intangible assets	26	29	38	32
Property, plant and equipment	28	31	197	176
Other non-current assets	-	-	27	20
Inventories	29	21	25	17
Receivables	23	27	56	34
Cash and cash equivalents	3	4	32	27
Total assets	**109**	**112**	**375**	**306**
Liabilities				
Provisions (non-current)	4	4	3	3
Borrowings (non-current)	-	-	23	23
Other non-current liabilities	-	-	26	28
Borrowings and financial derivatives (current)	3	12	85	75
Other current liabilities	12	17	80	46
Total liabilities	**19**	**33**	**217**	**175**
Net assets (100% basis)	**90**	**79**	**158**	**131**
Net sales	55	45	202	700
Profit for the year	13	3	(6)	(18)
Total comprehensive income	(1)	3	1	(18)
Operating cash flows	15	3	18	15
Dividend paid to non-controlling interests	-	-	5	13

[1] Including DNCC Nanjing (CN); due to the disposal of the bulk chemicals activities only up to and including July 2015

18 Provisions

	Restructuring costs and termination benefits	Environmental costs	Other long-term employee benefits	Other provisions	Total
Balance at 1 January 2015	**43**	**28**	**47**	**29**	**147**
Of which current	24	2	4	12	42
Changes in 2015:					
- Additions	51	3	5	23	82
- Releases	(7)	-	-	(19)	(26)
- Uses	(48)	(4)	(2)	(7)	(61)
- Acquisitions	-	-	4	-	4
- Disposals	(4)	(1)	(9)	(1)	(15)
- Exchange differences	4	1	-	(2)	3
- Other reclassifications	-	-	(1)	6	5
Total changes	(4)	(1)	(3)	-	(8)
Balance at 31 December 2015	**39**	**27**	**44**	**29**	**139**
Of which current	28	2	3	8	41
Changes in 2016:					
- Additions	59	28	1	13	101
- Releases	(3)	(2)	-	-	(5)
- Uses	(34)	(4)	(1)	(15)	(54)
- Exchange differences	1	-	-	-	1
Total changes	23	22	-	(2)	43
Balance at 31 December 2016	**62**	**49**	**44**	**27**	**182**
Of which current	35	7	3	9	54

In cases where the effect of the time value of money is material, provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The discount rate used decreased from 2.0% to 1.7%. The balance of provisions measured at present value increased by €0.7 million in 2016 in view of the passage of time (2015: increase of €0.4 million).

The provisions for restructuring costs and termination benefits mainly relate to the costs of redundancy schemes connected to the dismissal and transfer of employees and costs of termination of contracts. These provisions have an average life of 1 to 3 years.

The provisions for environmental costs relate to soil clean-up obligations, among other things. These provisions have an average life of around 10 years.

The addition to the provision for environmental costs relates mainly to discontinued businesses in the US and the Netherlands, next to the existing soil remediation plans.

The provisions for other long-term employee benefits mainly relate to length-of-service and end-of-service payments. The average life of this provision is estimated to be between 10 and 12 years.

Several items have been combined under Other provisions, for example onerous contracts and legal risks. These provisions have an average life of 1 to 3 years.

The additions to the provisions for restructuring costs and termination benefits in 2016 mainly relate to the various restructuring projects (same as in 2015), in particular for the Support functions (€36 million) and the Engineering Plastics business (€14 million).

19 Borrowings

	2016 Total	2016 Of which current	2015 Total	2015 Of which current
Debenture loans	3,290	749	2,541	-
Private loans	44	37	38	22
Finance lease liabilities	4	-	-	-
Credit institutions / commercial paper	67	67	231	231
Total	**3,405**	**853**	**2,810**	**253**

In agreements governing loans with a residual amount at year-end 2016 of €3,290 million, of which €749 million is of a short-term nature (31 December 2015: €2,541 million, none of which of a short-term nature), negative pledge clauses have been included that restrict the provision of security.

The documentation of the €750 million bond issued in October 2007, the €300 million bond issued in November 2013, the €500 million bond issued in March 2014, the €500 million bond issued in April 2015, the €500 million bond issued in September 2015 and the €750 million bond issued in September 2016 include a change-of-control clause. This clause allows the bond investors to request repayment at par if 50% or more of the DSM shares are controlled by a third party and if the company is downgraded below investment grade (< BBB-). In December 2016, Moody's left the negative outlook for their A3 credit rating for DSM unchanged. Standard & Poor's confirmed DSM's credit rating in March 2016 to be A- with a stable outlook.

At 31 December 2016, there was €2,245 million in borrowings outstanding with a remaining term of more than five years (at 31 December 2015, there was €1,493 million with a remaining term of more than five years).

The schedule of repayment of borrowings is as follows:

Borrowings by maturity

	2016	2015
2016	-	253
2017	853	760
2018	6	4
2019	300	300
2020 and 2021	1	-
After 2021	2,245	1,493
Total	**3,405**	**2,810**

A breakdown of the borrowings by currency is given in the following table:

Borrowings by currency

	2016	2015
EUR	3,291	2,693
USD	38	37
CNY	5	20
TWD	50	47
Other	21	13
Total	**3,405**	**2,810**

On balance, total borrowings increased by €595 million owing to the following changes:

Movements of borrowings

	2016	2015
Balance at 1 January	**2,810**	**2,780**
Loans taken up	754	1,008
Repayments	(4)	(653)
Acquisitions/disposals	8	(121)
Changes in debt to credit institutions/commercial paper	(161)	(232)
Exchange differences	(2)	28
Balance at 31 December	**3,405**	**2,810**

The average effective interest rate on the portfolio of borrowings outstanding in 2016, including hedge instruments related to these borrowings, amounted to 3.40% (2015: 3.63%).

A breakdown of debenture loans is given below:

Debenture loans

			Nom. amt.	2016	2015
EUR loan	5.25%	2007-2017	750	749	748
EUR loan	1.75%	2013-2019	300	300	300
EUR loan	2.38%	2014-2024	500	498	497
EUR loan	1.00%	2015-2025	500	497	497
EUR loan	1.38%	2015-2022	500	499	499
EUR loan	0.75%	2016-2026	750	747	-
Total			**3,300**	**3,290**	**2,541**

All debenture loans have a fixed interest rate.

At the end of 2016, an amount of €300 million (year-end 2015: €300 million) of the 5.25% EUR loan 2007-2017 was swapped into CHF to hedge the currency risk of net investments in CHF-denominated subsidiaries. In 2006 and 2007, the loan had been partly pre-hedged (cash flow hedge) by means of forward starting swaps, leading to a lower effective fixed interest rate of 4.89% for the full loan.

The 1.75% EUR bond 2013-2019 of €300 million has an effective interest rate of 1.76%. The 2.375% EUR bond 2014-2024 of €500 million was pre-hedged by means of forward starting swaps, resulting in an effective interest rate for this bond at 3.97% including settlement of pre-hedge. The 1.375% EUR bond 2015-2022 of €500 million has an effective interest rate of 1.40%.

The 1% EUR bond 2015-2025 of €500 million was pre-hedged by means of forward starting swaps, resulting in an effective interest rate for this bond at 3.65% including settlement of pre-hedge. In September 2016, a new 0.75% EUR bond of €750 million was issued for a tenor of 10 years.

In August 2015, pre-hedge contracts were concluded for an intended refinancing in 2017 of the 5.25% EUR loan 2007-2017 by means of a collar on 10-year interest with a floor of 1% and capped at 1.97%, both excluding DSM spread. At the issue of the new bond this pre-hedge was settled. The effective interest rate of the new bond amounts 1.08% including settlement of pre-hedge. The time value at moment of settlement of the collar amounted €4 million negative (year-end 2015: €1 million negative), resulting in a charge for 2016 of €3 million reported in Financial income and expense.

A breakdown of private loans is given below:

Private loans

			2016	2015
TWD loan	floating (1 month)	2013-2018	34	31
Other loans			10	7
Total			**44**	**38**

DSM's policy regarding financial-risk management is described in Note 23.

20 Other non-current liabilities

	2016	2015
Investment grants	41	40
Deferred items	20	11
Drawing rights	68	160
Other non-current liabilities	29	17
Total	**158**	**228**

The decrease in the non-current liabilities relates to the drawing rights agreements with ChemicalInvest for caprolactam supply for a period of 15 years. See Note 8 'Intangible assets' for further details on this change.

21 Current liabilities

	2016	2015
Trade payables		
Received in advance	6	4
Trade accounts payable	1,276	1,114
Notes and cheques due	5	6
Owing to associates and joint ventures	89	44
Total Trade payables	**1,376**	**1,168**
Income tax payable	**56**	**32**
Other current liabilities		
Other taxes and social security contributions	51	44
Interest	26	25
Pensions	4	6
Investment creditors	100	103
Employee-related liabilities	278	256
Payables associates and joint ventures relating to cash facility	62	137
Other liabilities	18	69
Deferred items	1	2
Total Other current liabilities	**540**	**642**

22 Contingent liabilities and other financial obligations

The contingent liabilities and other financial obligations in the following table are not recognized in the balance sheet.

	2016	2015
Operating leases and rents	83	93
Guarantee obligations on behalf of associates and third parties	117	142
Outstanding orders for projects under construction	31	21
Other	4	4
Total	**235**	**260**

Guarantee obligations are principally related to VAT and duties on the one hand and to financing obligations of associates on the other. Most of the outstanding orders for projects under construction will be completed in 2017. Property, plant and equipment under operating leases primarily concerns catalysts, buildings and various equipment items.

The commitments for operating leases and rents are spread as follows:

Operating leases and rents

	2016	2015
2016	-	43
2017	31	5
2018	4	4
2019	4	3
2020	4	3
2021	4	3
After 2021	36	32
Total	**83**	**93**

Litigation

DSM has a process in place to monitor legal claims periodically and systematically.

DSM is involved in several legal proceedings, most of which are related to the ordinary course of business. DSM does not expect these proceedings to result in liabilities that have a material effect on the company's financial position. In cases where it is probable that the outcome of the proceedings will be unfavorable, and the financial outcome can be measured reliably, a provision has been recognized in the financial statements and disclosed in Note 18 'Provisions'.

In 2015 an award was issued against DSM Sinochem Pharmaceuticals India Private Ltd. (DSP India) in a protracted arbitration case in India going back to 2004 involving a joint venture that DSP India had formed with Hindustan Antibiotics Ltd., which suspended its operations in 2003. DSP India is covered by an indemnity from Koninklijke DSM N.V. for this case. In 2015 DSP India has made an application with the Civil Court in Pune (India) to set aside the arbitral award. The award amounts to approximately € 18 million (excluding interest of 12% per annum). At the end of 2016, the application proceedings were still pending. DSM has always viewed this case as unfounded and is of the opinion that the likelihood of the award being ultimately set aside is high. Therefore no liability is recognized in respect of this case.

23 Financial instruments and risks

Policies on financial risks

General

The main financial risks faced by DSM relate to liquidity risk, market risk (comprising interest rate risk, currency risk and price risk) and credit risk. DSM's financial policy is aimed at minimizing the effects of fluctuations in currency-exchange and interest rates on its results in the short term and following market rates in the long term. DSM uses financial derivatives to manage financial risks relating to business operations and does not enter into speculative derivative positions. DSM does not hold financial instruments with embedded derivatives. DSM's financial policy, including policies and processes for managing capital, is discussed more extensively in Financial and reporting policy of the Report by the Managing Board.

Liquidity risk

Liquidity risk is the financial risk due to uncertain development of liquidity. An institution may not get access to sufficient liquidity if its credit rating falls, when it experiences sudden unexpected cash outflows or an unexpected drop in cash inflows, or some other event causes counterparties to avoid trading with or lending to the institution. A company is also exposed to liquidity risk if markets on which it depends are subject to loss of liquidity.

DSM has two committed credit facilities: one facility of € 500 million issued in 2011 and maturing in September 2018 and one facility issued in 2013 of € 500 million and maturing in March 2020. Together, the facilities amount to a total of € 1,000 million (2015: € 1,000 million).

Furthermore, DSM has a commercial paper program amounting to € 1,500 million (2015: € 1,500 million). The company will use the commercial paper program to a total of not more than € 1,000 million (2015: € 1,000 million). The agreements for the committed credit facilities have neither financial covenants nor material adverse changes clauses. At year-end 2016, no loans had been taken up under the committed credit facilities. DSM has no derivative contracts to manage currency risk or interest rate risk outstanding under which margin calls by the counterparty would be permitted.

Floating-rate and fixed-rate borrowings and monetary liabilities analyzed by maturity are summarized in the following table. Borrowings excluding credit institutions are shown after taking into account related interest rate derivatives in designated hedging relationships. DSM manages financial liabilities and related derivative contracts on the basis of the remaining contractual maturities of these instruments. The remaining maturities presented in the following table provide an overview of the timing of the cash flows related to these instruments. Financial assets are not linked to financial liabilities in order to meet cash outflows on these liabilities.

Borrowings and monetary liabilities by maturity

2015	Fixed-rate borrowings	Floating-rate borrowings	Monetary liabilities	Guarantees	Subtotal	Interest payments	Cash at[1] redemption	Total cash out
2015								
Within 1 year	1	21	2,073	-	2,095	69	19	2,183
Within 1 to 2 years	751	7	8	-	766	68	13	847
Within 2 to 3 years	1	3	8	-	12	29	10	51
Within 3 to 4 years	300	-	7	-	307	29	10	346
Within 4 to 5 years	2	-	25	-	27	24	9	60
After 5 years	1,493	-	112	142	1,747	87[2]	59	1,893
Total	**2,548**	**31**	**2,233**	**142**	**4,954**	**306**	**120**	**5,380**
2016								
Within 1 year	756	30	2,039	-	2,825	74	6	2,905
Within 1 to 2 years	-	6	3	-	9	35	5	49
Within 2 to 3 years	300	-	4	-	304	35	4	343
Within 3 to 4 years	-	-	14	-	14	29	4	47
Within 4 to 5 years	1	-	2	-	3	29	3	35
After 5 years	2,245	-	45	117	2,407	91[2]	25	2,523
Total	**3,302**	**36**	**2,107**	**117**	**5,562**	**293**	**47**	**5,902**

1 Difference between nominal redemption and amortized costs
2 Cumulative interest payment in remaining years

The exposure of the financial derivatives to liquidity risk is as follows. The amounts are gross and undiscounted.

Financial derivatives cash flow

	2016	2017	2018	2019	2020	2021	Total
2015							
Inflow	1,382	1,058	42	55	42	-	2,579
Outflow	(1,418)	(1,177)	(49)	(62)	(43)	-	(2,749)
2016							
Inflow	-	2,143	42	58	42	12	2,297
Outflow	-	(2,337)	(43)	(66)	(45)	(12)	(2,503)

Interest rate risk

Interest rate risk is the risk that adverse movements of interest rates lead to high costs on interest-bearing debt, which negatively impact the company's capability to honor its commitments.
DSM's interest rate risk policy is aimed at minimizing the interest rate risks associated with the financing of the company and thus at the same time optimizing the net interest costs. This policy translates into a certain desired profile of fixed-interest and floating-interest positions, including cash and cash equivalents, with the floating-interest position not exceeding 60% of net debt.

As at 31 December 2016, DSM had no outstanding fixed-floating interest rate swaps (end of 2015 only pre-hedges for refinancing in 2017). The zero-cost collar as pre-hedge for the interest rate of a €750 million bond to be issued in 2017 was settled at the early refinance in September 2016, making use of the positive market conditions. See Note 19 'Borrowings'.

The following analysis of the sensitivity of borrowings and related financial derivatives to interest rate movements assumes an instantaneous 1% change in interest rates for all currencies and maturities from their level on 31 December 2016, with all other variables held constant. A 1% reduction in interest rates would result in a €5 million pre-tax loss in the income statement on the basis of the composition of financial instruments on 31 December 2016, as floating-rate borrowings are more than compensated for by floating-rate assets (mainly cash). The opposite applies in the case of a 1% increase in interest rates. The sensitivity of the fair value of financial instruments on 31 December 2016 to changes in interest rates is set out in the following table:

Sensitivity of fair value to change in interest rate

	2016				2015			
	Carrying amount	Fair value	Sensitivity of fair value to change in interest of:		Carrying amount	Fair value	Sensitivity of fair value to change in interest of:	
			+1%	(1%)			+1%	(1%)
Loans to associates and joint ventures	253	258	(7)	6	228	234	(7)	7
Current investments	944	945	(5)	5	9	9	-	-
Cash and cash equivalents	604	604	-	-	665	665	-	-
Short-term borrowings	(853)	(886)	7	(7)	(253)	(253)	1	(1)
Long-term borrowings	(2,552)	(2,717)	185	(203)	(2,557)	(2,750)	144	(156)
Interest rate swaps (fixed to floating and pre-hedges)	-	-	-	-	(1)	(1)	31	(31)

Currency risk

Currency risk is the risk that adverse movements of foreign currency rates lead to losses on assets or liabilities in currencies, which negatively impacts the results of operations and financial condition of the company.
It is DSM's policy to hedge 100% of the currency risks resulting from sales and purchases at the moment of recognition of the receivables and payables. In addition, operating companies may – under strict conditions – opt for hedging currency risks from firm commitments and forecasted transactions. The currencies giving rise to these risks are primarily USD, GBP and JPY. The risks arising from currency exposures are regularly reviewed and hedged when appropriate. DSM uses average-rate currency forward contracts, currency forward contracts, spot contracts, and average-rate currency options to hedge the exposure to fluctuations

in foreign exchange rates. At year-end, these instruments had remaining maturities of less than one year. For the hedging of currency risks from firm commitments and forecasted transactions cash flow, hedge accounting is applied: valuation effects of hedge obligations are reported as Hedging reserve in Note 16 'Equity'. Hedge accounting is not applied for hedges of recognized trade receivables and trade payables hedged with short-term derivatives.

To hedge intercompany loans, receivables and payables denominated in currencies other than the functional currency of the subsidiaries, DSM uses currency swaps or forward contracts. Cash flow hedge accounting is applied for instruments related to some larger internal loans with a total notional amount of €865 million. As at 31 December 2016, the notional amount of the currency forward contracts was €2,241 million (2015: €2,541 million).

In 2016, DSM hedged USD 580 million (2015: USD 650 million) of its projected net cash flow in USD in 2017, of which USD 190 million against EUR and USD 390 million against CHF by means of average-rate currency forward contracts at an average exchange rate of USD 1.14 per euro and CHF 0.96 per US dollar, respectively, for the four quarters of 2017. In 2016, DSM also hedged JPY 5,550 million (2015: JPY 5,450 million) of its projected net cash flow in JPY in 2017, of which JPY 4,000 million against CHF and JPY 1,550 million against EUR by means of average-rate currency forward contracts at an average exchange rate of JPY 108 per Swiss franc and JPY 118 per euro, respectively, for the four quarters of 2017. DSM also continued the hedge of projected GBP cash obligations against CHF, namely GBP 11 million at an average exchange rate of CHF 1.32 per British pound. These hedges have fixed the exchange rate for part of the USD and JPY receipts and GBP payments in 2017. Cash flow hedge accounting is applied for these hedges. As a result of similar hedges concluded in 2015 for the year 2016, in 2016 €32 million negative (2015: €40 million negative) was recognized in the operating income of the segments involved in accordance with the realization of the expected cash flows. There was no material ineffectiveness in relation to these hedges.

The currency risk associated with the translation of DSM's net investment in entities denominated in currencies other than the euro was partially hedged at year-end 2016. CHF-denominated net assets have been partially hedged by currency swaps (2016: CHF 370 million; 2015: CHF 370 million). There was no material ineffectiveness in relation to these hedges.

The following analysis of the sensitivity of net borrowings and derivative financial instruments to currency movements against the euro assumes a 10% change in all foreign currency rates against the euro from their level on 31 December, with all other variables held constant. A +10% change indicates a strengthening of the foreign currencies against the euro. A -10% change represents a weakening of the foreign currencies against the euro.

Sensitivity of fair value to change in exchange rate

				2016				2015
	Carrying amount	Fair value	Sensitivity of fair value to change in all exchange rates of:		Carrying amount	Fair value	Sensitivity of fair value to change in all exchange rates of:	
			+10%	(10%)			+10%	(10%)
Loans to associates and joint ventures	253	258	6	(6)	228	234	6	(6)
Current investments	944	945	34	(34)	9	9	1	(1)
Cash and cash equivalents	604	604	42	(42)	665	665	54	(54)
Short-term borrowings	(853)	(886)	(10)	10	(253)	(253)	(18)	18
Long-term borrowings	(2,552)	(2,717)	(1)	1	(2,557)	(2,750)	(1)	1
Interest rate swaps	-	-	-	-	(1)	(1)	-	-
Cross currency swaps	(136)	(136)	(108)	108	(110)	(110)	(112)	112
Currency forward contracts	(3)	(3)	(20)	20	-	-	(19)	19
Cross currency swaps related to net investments in foreign entities[1]	(47)	(47)	(36)	36	(47)	(47)	(38)	38
Average-rate forwards used for economic hedging[2]	(27)	(27)	(17)	17	(27)	(27)	(19)	19

1 Fair-value change reported in Translation reserve
2 Fair-value change reported in Hedging reserve

Fair-value changes on these positions will generally be recognized in profit or loss, with the exception of the instruments for which cash flow hedge accounting or net-investment hedge accounting is applied. Cash flow hedge accounting is applied for the average-rate forwards and average-rate currency options used for economic hedging; the fair value changes of these derivatives are recognized in the Hedging reserve in equity until recognition of the related cash flows. See also 'Financial derivatives cash flow'. Net-investment hedge accounting is applied for the cross-currency swaps used to protect net investments in foreign entities; the fair-value changes of these derivatives are recognized in the Translation reserve in equity until the net investment is disposed of, to the extent that the changes in fair value are caused by changes in currency-exchange rates.

Price risk

Financial instruments that are subject to changes in stock exchange prices or indexes are subject to a price risk. At year-end 2016, price risks related to investments in securities were limited.

Credit risk

Credit risk is the risk that a (commercial or financial) counterparty may not be able to honor a financial commitment vis-à-vis DSM. The company manages the credit risk to which it is exposed by applying credit limits per institution and by dealing exclusively with institutions having a high credit rating.

At the balance sheet date there were no significant concentrations of credit risk other than some financing relationships with associates and joint ventures (see Note 10).

With regard to treasury activities (for example cash, cash equivalents and financial derivatives held with banks or financial institutions) it is ensured that financial transactions are only concluded with counterparties that have at least a Moody's credit rating of A3 for long-term instruments. At business group level, outstanding receivables are continuously monitored by the management of the operating companies. Appropriate allowances are made for any credit risks that have been identified (as listed in Note 13 'Current receivables'). It is therefore unlikely that significant losses will arise in relation to receivables that have not been provided for.

The maximum exposure to credit risk is represented by the carrying amounts of financial assets that are recognized in the balance sheet, including derivative financial instruments. DSM has International Swaps and Derivatives Association (ISDA) agreements in place with its financial counterparties that allow for the netting of exposures in case of a default of either party. No significant agreements or financial instruments were available at the reporting date that would reduce the maximum exposure to credit risk. Information about financial assets is presented in Note 10 'Associates and joint ventures', Note 11 'Other financial assets', Note 13 'Current receivables', Note 14 'Current investments', Note 15 'Cash and cash equivalents' and Note 23 'Financial instruments and risks'. Information on guarantees is presented in Note 22 'Contingent liabilities and other financial obligations'.

Fair value of financial instruments

In the following table the carrying amounts and the estimated fair values of financial instruments are given:

	31 December 2016		31 December 2015	
	Carrying amount	Fair value	Carrying amount	Fair value
Assets				
Other participations	50	50	51	51
Loans to associates and joint ventures	253	258	228	234
Other non-current receivables	136	136	113	113
Current receivables	1,653	1,653	1,556	1,556
Financial derivatives	40	40	47	47
Current investments	944	944	9	9
Cash and cash equivalents	604	604	665	665
Liabilities				
Non-current borrowings	2,552	2,717	2,557	2,750
Drawing rights liabilities	68	68	160	160
Current borrowings	853	886	253	253
Financial derivatives	253	253	232	232
Other current liabilities	1,972	1,972	1,842	1,842

The following methods and assumptions were used to determine the fair value of financial instruments: cash, current investments, current receivables, current borrowings and other current liabilities are stated at carrying amount, which approximates fair value in view of the short maturity of these instruments. The fair values of financial derivatives and long-term instruments are based on calculations, quoted market prices or quotes obtained from intermediaries.

The portfolio of derivatives consists of average-rate forward contracts that are valued against average foreign exchange forward rates obtained from Bloomberg and other derivatives that are valued using a discounted cash flow model, applicable market yield curves and foreign exchange spot rates. All inputs for the fair value calculations represent observable market data that are obtained from external sources that are deemed to be independent and reliable.

DSM uses the following hierarchy for determining the fair value of financial instruments measured at fair value:

- Level 1: quoted prices in active markets for identical assets or liabilities
- Level 2: other techniques for which all inputs that have a significant effect on the fair value are observable, either directly or indirectly
- Level 3: techniques that use inputs that have a significant effect on the fair value that are not based on observable market data

The financial instruments that have a fair value different from the carrying amounts are classified as level 2 for both 2015 and 2016.

The following table shows the carrying amounts of the financial instruments recognized at fair value, broken down by type and purpose:

Carrying amounts financial instruments at fair value

	Fair value hierarchy	Assets	Liabilities	Total
Interest rate swaps	Level 2	-	(1)	(1)
Currency swaps	Level 2	2	(74)	(72)
Total financial derivatives related to borrowings / investments		**2**	**(75)**	**(73)**
Currency forward contracts	Level 2	45	(157)	(112)
Balance at 31 December 2015		**47**	**(232)**	**(185)**
Interest rate swaps	Level 2	-	-	-
Currency swaps	Level 2		(47)	(47)
Total financial derivatives related to investments		**-**	**(47)**	**(47)**
Currency forward contracts	Level 2	40	(206)	(166)
Balance at 31 December 2016		**40**	**(253)**	**(213)**

During the year there were no transfers between individual levels of the fair value hierarchy.

24 Post-employment benefits

The group operates a number of defined benefit plans and defined contribution plans throughout the world, the assets of which are generally held in separately administered funds. The pension plans are generally funded by payments from employees and from the relevant group companies. The group also provides certain additional healthcare benefits to retired employees in the US.

Post-employment benefits relate to obligations that will be settled in the future and require assumptions to project benefit obligations. Post-employment benefit accounting is intended to reflect the recognition of post-employment benefits over the employee's approximate service period, based on the terms of the plans and the investment and funding. The accounting requires management to make assumptions regarding variables such as discount rate, future salary increases, life expectancy, and future healthcare costs. Management consults with external actuaries regarding these assumptions at least annually for significant plans.

Changes in these key assumptions can have a significant impact on the projected defined benefit obligations, funding requirements and periodic costs incurred.

The charges for pension costs recognized in the income statement (Note 5) relate to the following:

Pension costs

	2016	2015
Defined benefit plans:		
Pension costs included in employee benefit costs:		
- Current service costs pension plans	35	35
- Healthcare plans	-	1
- Other post-employment benefits	1	2
Defined contribution plans	95	84
Total pension costs included in employee benefits costs	**131**	**122**
- Pension costs included in Other operating income	(16)[1]	(12)
Total Continuing operations	**115**	**110**
Discontinued operations	-	9
Pension costs included in Net finance costs	10	11
Pension costs included in APM adjustments	1	(11)
Total	**126**	**119**

[1] Curtailment gains because of plan freezes in the UK and the US

For 2017, costs (continuing operations) for the defined benefit plans relating to pensions will be € 38 million (2016: € 36 million).

Changes in Employee benefits liabilities recognized in the balance sheet are shown in the following overview:

Employment benefits liabilities

	2016	2015
Balance at 1 January	**540**	**524**
Changes:		
- Balance of actuarial (gains) / losses	8	61
- Employee benefits costs	32	29
- Contributions by employer	(49)	(79)
- Acquisitions	-	1
- Disposals	-	(20)
- Exchange differences	(1)	21
- Reclassification from/to held for sale	-	-
- Other changes	-	3
Total changes	**(10)**	**16**
Balance at 31 December	**530**	**540**

The Employee benefits liabilities of € 530 million (2015: € 540 million) consist of € 509 million related to pensions (2015: € 521 million), € 7 million related to healthcare and other costs (2015: € 7 million), and € 14 million related to other post-employment benefits (2015: € 12 million).

Pensions

The DSM group companies have various pension plans, which are geared to the local regulations and practices in the countries in which they operate. As these plans are designed to comply with the statutory framework, tax legislation, local customs and economic situation of the countries concerned, it follows that the nature of the plans varies from country to country. The plans are based on local legal and contractual obligations.

DSM’s current policy is to offer defined contribution retirement benefit plans to new employees wherever possible. However, DSM still has a (small) number of defined benefit pension and healthcare schemes from the past. Generally, these schemes have been funded through external trusts or foundations, where DSM faces the potential risk of funding shortfalls. The most significant defined benefit schemes are:

- Pension Plan at DSM Nutritional Products AG in Switzerland (DNP AG)
- DSM UK Pension Scheme in the UK
- Consolidated Pension Plan from DSM Services USA in the US
- Pension Plan at DSM Nutritional Products GmbH in Germany (DNP GmbH)

For each plan the following characteristics are relevant:

DNP AG Pension Plan in Switzerland

The DNP AG Pension Plan is a typical Swiss Cash Balance plan. For accounting purposes this plan is qualified as a defined benefit plan. It is a contribution based-plan. There is no promise of indexation for on-going pensions. The Swiss state minimal requirements for occupational benefit plans have however to be respected; the Minimum Guaranteed Interest Return on the cash balance accounts for 2016 was 1.25% (2015: 1.75%) for the mandatory portion (BVG/LPP). There is also a minimal conversion rate applicable.

The pension plan is managed and controlled by a DSM company pension fund. The board of Trustees consists of representatives of the employer and the employees who have an independent role.

The plan assets are collectively invested (no individual investment choice). In 2016 an Asset Liability Management (ALM) study was performed which has led to an adjustment of the investment strategy.

The current funding level, based on local standards, is 115% (estimate 31 December 2016), which is above the legally required minimum funding level.

DSM UK Pension Scheme

The DSM UK Pension Scheme is closed per 30 September 2016 for all pension accruals. An unconditional indexation policy is applicable for the vested pension rights. The pension plan is managed and controlled by a DSM company pension fund. The board of Trustees consists of representatives of the employer and the employees who have an independent role. The impact of the plan freeze on the pension fund strategy will be discussed in 2017.

In 2015, an ALM study was performed to support the development of a de-risking strategy.

The current funding level, based on local standards, is 94% (estimate 31 December 2016). In the UK, funding requirements are a result of the triennial valuation. A new valuation was performed in 2016, resulting in the continuation of the annual recovery contributions (GBP 1 million) and the company guarantee of GBP 14 million.

Consolidated Plan in the US

The Consolidated Plan in the US has been closed to new entrants since 2014. As of 31 December 2016, the plan was closed for pension accrual of the non-unionized employees. New accrual is only applicable for a small group of unionized employees.

There is no indexation applicable for the vested pension rights. DSM will continue to pay (recovery) contributions into this pension scheme. The pension plan is managed and controlled by a DSM company pension fund. The board of Trustees consists of representatives of the employer and the employees who have an independent role. Since 2011, there has been a separate investment strategy for the closed plan (liability related to divested businesses/companies) and the open plan (liability related to the current businesses/companies). The investment strategy for the closed plan has a very low risk profile, whereas the investment strategy for the open plan anticipates on expected future returns on equity. This investment strategy is supported by an ALM study which was carried out in 2014. For both the open and the closed plan there is a de-risking strategy applicable to ensure that the asset will be de-risked if the funding level improves. The impact of the plan freeze on the pension fund strategy will be discussed in the course of 2017. The internal funding policy of this plan is based on IFRS valuation. This implies a stricter funding policy than the minimum requirements on local funding. The current IFRS funding level is 84% (30 November 2016), whereas the funding level on local standards (Pension Protection Act) is 114% (estimate 30 November 2016). The minimum required funding level on local standards is 80% on the basis of this Act.

DNP GmbH Pension Plan in Germany

The DNP GmbH Pension Plan in Germany has been closed to new entrants as of 31 December 2008. Accrual is still applicable for employees who have been participating in the plan since 2008. The pension plan is a final pay pension plan (averaged over the last 12 months prior to retirement) and service-related benefit. The liability is on the balance sheet of DNP GmbH. No assets are allocated to this liability. All reimbursements will be paid out by DNP GmbH.

The most important unfunded plans are in Germany. They amount to €312 million (2015: €296 million).

The changes in the present value of the defined benefit obligations and in the fair value of plan assets of the major plans are listed below:

Present value of defined benefit obligations

	2016	2015
Balance at 1 January	1,745	1,564
Changes:		
- Service costs	35	37
- Interest costs	32	34
- Contributions	14	14
- Actuarial (gains)/losses	65	43
- Past service costs	-	(4)
- Curtailments/termination benefits	(15)	(9)
- Acquisitions/disposals		(2)
- Exchange differences	(11)	131
- Settlements	-	-
- Benefits paid	(59)	(63)
Balance at 31 December	1,806	1,745

Fair value of plan assets

	2016	2015
Balance at 1 January	1,224	1,086
Changes:		
- Interest income on plan assets	23	24
- Actuarial gains/(losses)	60	(22)
Actual return on plan assets	83	2
- Contributions by employer	33	57
- Contributions by employees	14	14
- Disbursement	(46)	(50)
- Exchange differences	(10)	112
- Settlements	-	-
- Other	-	3
Balance at 31 December	1,298	1,224

The actuarial gains/losses as included in the previous tables can be specified as follows:

Remeasurement effects as included in Other comprehensive income

	2016	2015
Defined benefit obligation major pension plans		
Actuarial (gain)/loss due to experience	(15)	39
Actuarial (gain)/loss due to demographic assumption	(16)	(2)
Actuarial (gain)/loss due to financial assumption changes	96	6
	65	43
Plan assets major pension plans		
Change in irrecoverable surplus other than interest	(1)	-
Return on plan assets (greater)/ less then discount rate	60	(22)
	59	(22)
Total actuarial (gain)/loss	**6**	**65**
Actuarial (gain)/loss other plans	2	(4)
Total actuarial (gain)/loss	**8**	**61**

The amounts recognized of these major plans in the balance sheet are as follows:

Net assets/liabilities

	2016	2015
Present value of funded obligations	(1,484)	(1,440)
Fair value of plan assets	1,298	1,224
	(186)	**(216)**
Present value of unfunded obligations	(322)	(305)
Funded status	**(508)**	**(521)**
Effect of asset ceiling	(1)	-
Net assets/liabilities[1]	**(509)**	**(521)**
Of which:		
- Liabilities (Employee benefits liabilities)	(509)	(521)
- Assets (Prepaid pension costs)	-	-

[1] Excluding less material plans with a net liability of €21 million (2015: €19 million)

The changes in the net assets/liabilities recognized in the balance sheet are as follows:

Changes in net assets/liabilities

	2016	2015
Balance at 1 January	**(521)**	**(478)**
Expense recognized in the income statement	(29)	(32)
Actuarial gains/(losses) recognized directly in Other comprehensive income during the year	(6)	(65)
Contributions paid by employer	33	58
Disbursements and settlements paid by employer	13	12
Acquisitions/disposals	-	2
Exchange differences	2	(19)
Other	(1)	1
Balance at 31 December[1]	**(509)**	**(521)**

[1] Excluding less material plans with a net liability of €21 million (2015: €19 million)

In 2017, DSM is expected to contribute €27 million (actual 2016: €33 million) to its major defined benefit plans.

The major categories of pension-plan assets as a percentage of total plan assets are as follows:

Pension-plan assets by category

	2016	2015
Bonds	53%	53%
Equities	32%	33%
Property	12%	11%
Other	3%	3%

The pension-plan assets include neither ordinary DSM shares nor property occupied by DSM.

The total expense recognized in the income statement is as follows:

Costs major defined benefit plans

	2016	2015
Current service costs	35	37
Net interest costs	10	10
Past service costs in Other operating income	(16)	(4)
Costs included in APM adjustments	1	(11)
Costs related to defined benefit plans	**30**	**32**

The main actuarial assumptions for the year (weighted averages) are:

Actuarial assumptions for plans outside the Netherlands

	2016	2015
Discount rate	1.63%	1.98%
Price inflation	1.57%	1.70%
Salary increase	2.08%	2.40%
Pension increase	0.88-2.15%	0.87-2.1%

Year-end amounts for the current and previous periods are as follows:

Major defined benefit plans per year

	2016	2015	2014	2013	2012
Defined benefit obligations	(1,806)	(1,745)	(1,564)	(1,316)	(1,317)
Plan assets	1,297	1,224	1,086	958	931
Funded status of asset/(liability)	**(509)**	**(521)**	**(478)**	**(358)**	**(386)**
Experience adjustments on plan assets, gain/(loss)	60	(22)	61	7	55
Experience adjustments on plan liabilities, gain/(loss)	15	(39)	(1)	16	(27)
Gain/(loss) on liabilities due to changes in assumptions	(80)	(4)	(222)	(25)	(157)

Sensitivities of significant actuarial assumptions

The discount rate, the future increase in wages and salaries and the pension increase rate were identified as significant actuarial assumptions. The following impacts on the defined benefit obligation are to be expected:

- A 0.25% increase/decrease in the discount rate would lead to a decrease/increase of 3.6% in the defined benefit obligation
- A 0.25% increase/decrease in the expected increase in salaries/wages would lead to an increase/decrease of 0.4% in the defined benefit obligation
- A 0.25% increase/decrease in the expected rate of pension increase would lead to an increase/decrease of less than 1.0% in the defined benefit obligation

The sensitivity analysis is based on realistically possible changes as of the end of the reporting year. Each change in a significant actuarial assumption was analyzed separately as part of the test. Interdependencies were not taken into account.

Healthcare and other costs

In some countries, particularly in the US, group companies provide retired employees and their surviving dependants with post-employment benefits other than pensions, mainly allowances for healthcare expenses and life-insurance premiums. Some of these are unfunded; in these cases, approved expense claims are reimbursed out of the financial resources of the group companies concerned. These plans are not sufficiently material to warrant the individual disclosures required by IAS 19.

25 Net debt

The development of the components of net debt is as follows:

	Cash and cash equivalents	Current investments	Non-current borrowings	Current borrowings	Credit institutions	Derivatives	Total
Balance at 1 January 2015	**669**	**6**	**(1,637)**	**(641)**	**(502)**	**(315)**	**(2,420)**
Change from operating activities	696	-	-	-	-	225	921
Change from investing activities	(275)	3	64	8	45	136	(19)
Reclassification from non-current to current	-	-	30	(30)	-	-	-
Transfers	119	-	(1,004)	653	232	-	-
Dividend	(174)	-	-	-	-	-	(174)
Interest	(173)	-	-	-	-	-	(173)
Proceeds from reissued shares	39	-	-	-	-	-	39
Repurchase of shares	(122)	-	-	-	-	-	(122)
Derivatives	(130)	-	-	-	-	(221)	(351)
Other	1	-	-	-	-	-	1
Change from financing activities	(440)	-	(974)	623	232	(221)	(780)
Exchange differences	15	-	(10)	(12)	(6)	(10)	(23)
Total changes	(4)	3	(920)	619	271	130	99
Balance at 31 December 2015	**665**	**9**	**(2,557)**	**(22)**	**(231)**	**(185)**	**(2,321)**
Change from operating activities	1,018	-	-	-	-	8	1,026
Change from investing activities	(1,194)	935	-	(7)	-	-	(266)
Reclassification from non-current to current	-	-	759	(759)	-	-	-
Transfers	584	-	(748)	3	161	-	-
Dividend	(190)	-	-	-	-	-	(190)
Interest	(151)	-	-	-	-	27	(124)
Proceeds from reissued shares	137	-	-	-	-	-	137
Repurchase of shares	(273)	-	-	-	-	-	(273)
Derivatives	-	-	-	-	-	(65)	(65)
Other	6	-	(5)	-	-	-	1
Change from financing activities	113	-	6	(756)	161	(38)	(514)
Exchange differences	2	-	(1)	(1)	3	2	5
Total changes	(61)	935	5	(764)	164	(28)	251
Balance at 31 December 2016	**604**	**944**	**(2,552)**	**(786)**	**(67)**	**(213)**	**(2,070)**

26 Notes to the cash flow statement

The cash flow statement provides an explanation of the changes in cash and cash equivalents. It is prepared on the basis of a comparison of the balance sheets as at 1 January and 31 December. Changes that do not involve cash flows, such as changes in exchange rates, amortization, depreciation, impairment losses and transfers to other balance sheet items, are eliminated.

Changes in working capital due to the acquisition or disposal of consolidated companies are included under Investing activities.

Most of the changes in the cash flow statement can be traced back to the detailed statements of changes for the balance sheet items concerned. For those balance sheet items for which no detailed statement of changes is included, the table below shows the link between the change according to the balance sheet and the change according to the cash flow statement:

Change in operating working capital

	2016	2015
Operating working capital		
Balance at 1 January	1,808	1,948
Balance at 31 December	1,928	1,808
Balance sheet change	**120**	**(140)**
Adjustments:		
- Exchange differences	(78)	(127)
- Changes in consolidation (including acquisitions and disposals)	(4)	285
- Reclassification from / to held for sale	(3)	3
- Transfers / non cash value adjustments	23	31
Total change in operating working capital according to the cash flow statement	**58**	**52**

In 2016, the operating working capital of continuing operations before reclassification to held for sale was € 1,928 million, which amounts to 23.9% of annualized fourth quarter net sales (2015: 23.5%). Besides the business impact this increase was due to an exchange rate effect.

27 Share-based compensation

Under the DSM Stock Incentive Plan, performance-based and non-performance-based stock options or Share Appreciation Rights (SARs) are granted to senior management. Such a grant takes place on the first day on which the DSM stock is quoted ex-dividend following the Annual General Meeting of Shareholders. The opening price of the DSM stock on that day is the exercise price of the stock options and SARs.

Since 2011, only stock options have been granted, and Share Appreciation Rights are no longer used as share-based compensation.

Stock options and SARs have a term of eight years and are subject to a vesting period of three years. After this three-year period, one third of the stock options and SARs (non-performance-related) will vest and two thirds of the stock options and SARs that are performance-based will become exercisable in whole, in part, or not at all. Final vesting of the performance-based stock options depends on the total shareholder return (TSR) achieved by DSM in comparison with a peer group. The performance measurement of the 2016 option series is based on four equally weighted factors: Relative Total Shareholder Return (TSR) performance versus a peer group, Return on Capital Employed (ROCE) growth, Energy Efficiency Improvement (EEI), and Greenhouse-gas Emissions (GHGE) Efficiency Improvement. Non-vested performance-based stock options and SARs will be forfeited. If employment is terminated prior to the vesting date, specific rules regarding vesting and forfeitures apply. The exercise of stock incentives is regulated.

For members of the Managing Board specifically, only LTI performance shares have been granted since 2010 (no longer stock options). LTI performance shares vest after three years upon the realization of a predefined performance measure. The performance schedule is the same as that for stock options.

For LTI performance shares, see Note 12 'Remuneration of Managing Board and Supervisory Board' to the Financial statements of the parent company.

All stock options and LTI performance shares are settled by physical delivery of DSM shares, while SARs are settled in cash.

Overview of stock options and Share Appreciation Rights for management

Year of issue	Outstanding at 31 Dec. 2015	In 2016 Granted	Exercised	Average price (€)	Forfeited/ expired	Outstanding at 31 Dec. 2016	Fair value on grant date (€)	Exercise price (€)	Expiry date
2008	231,029	-	(229,779)	46.58	(1,250)	-	5.73	29.79	28 Mar. 2016
2009	281,800	-	(238,400)	57.12	-	43,400	2.83	21.10	27 Mar. 2017
2010	456,125	-	(231,625)	57.31	-	224,500	6.07	33.10	6 Apr. 2018
2011	921,483	-	(494,432)	57.48	(15,125)	411,926	9.60	46.20	2 May 2019
2012	756,263	-	(387,013)	56.29	(1,250)	368,000	6.88	40.90	15 May 2020
2013[1,2]	2,748,038	-	(536,675)	58.46	(1,595,775)[3]	615,588	9.23	48.91	7 May 2021
2014[1]	2,651,613	-	(139,000)	59.30	(311,625)[3]	2,200,988	10.66	52.00	9 May 2022
2015[1]	2,971,750	-	(78,750)	58.52	(314,125)[3]	2,578,875	9.89	50.98	5 May 2023
2016[1]	-	2,815,225	(4,500)	61.77	(66,250)[3]	2,744,475	9.36	52.57	3 May 2024
2016 Total	**11,018,101**	**2,815,225**	**(2,340,174)**	**56.54**	**(2,305,400)**	**9,187,752**			
Of which vested	3,188,150					1,983,364			
	at 31 Dec. 2014					at 31 Dec. 2015			
2015 Total	**11,088,364**	**3,115,000**	**(815,638)**	**52.34**	**(2,369,625)**	**11,018,101**			
Of which vested	2,767,500					3,188,150			

1 Stock options will partly vest, and may therefore be immediately exercised, upon termination of employment in connection with divestments, retirement or early retirement. The remaining term to exercise stock options or SARs after their vesting as a result of divestments, retirement or early retirement is limited to three years (the remaining term to exercise in the case of regular vesting is five years).
2 Based on TSR performance, the stock incentives tied to performance granted in 2013 did not vest and have been forfeited.
3 Number of forfeited options: 1,595,025 (2013), 300,375 (2014), 302,875 (2015) and 66,250 (2016).

DSM grants certain members of senior management performance shares based on EBITDA and ROCE performance targets set for 2016 and 2017. Settlement in shares takes place after this two-year period. If employment is terminated prior to the settlement date, specific rules regarding vesting and forfeitures apply. In 2016, DSM granted 42,791 shares under this plan against a fair value of € 45.22 per share. The fair value of these shares is determined based on the average quoted market price in Q1 2016. No shares forfeited in 2016.

Certain employees in the Netherlands are entitled to employee stock options that are granted on the first day on which the DSM stock is quoted ex-dividend following the Annual General Meeting of Shareholders. The opening price of the DSM stock on that day is the exercise price of the stock options. Employee stock options can immediately be exercised and have a term of five years.

Overview of stock options for employees

Year of issue	Outstanding at 31 Dec. 2015	In 2016 Granted	Exercised	Average price (€)	Forfeited/ expired	Outstanding at 31 Dec. 2016	Fair value on grant date (€)	Exercise price (€)	Exercise period until
2011	192,375	-	(166,260)	51.65	(26,115)	-	10.35	46.20	May 2016
2012	158,845	-	(99,740)	57.03	(1,060)	58,045	6.79	40.90	May 2017
2013	155,565	-	(84,105)	59.38	(2,690)	68,770	6.51	48.91	May 2018
2014	262,305	-	(141,010)	59.64	(4,745)	116,550	5.68	52.00	May 2019
2015	114,065	-	(61,515)	59.52	(2,300)	50,250	4.50	50.98	May 2020
2016	-	561,135	(299,310)	59.67	(4,210)	257,615	4.38	52.57	May 2021
2016 Total	**883,155**	**561,135**	**(851,940)**	**57.75**	**(41,120)**	**551,230**			
2015 Total	927,490	130,385	(152,410)	53.23	(22,310)	883,155			

Measurement of fair value

The costs of option plans are measured by reference to the fair value of the options at the date on which the options are granted. The fair value is determined using the Black-Scholes model, taking into account market conditions linked to the price of the DSM share. Stock-price volatility is determined on the basis of historical volatilities of the DSM share price measured each month over a period equal to the expected option life. The costs of these options are recognized in the income statement (Employee benefits costs).

The following assumptions were used in the Black-Scholes model to determine the fair value at grant date:

	2016	2015
Management options		
Risk-free rate	(0.23%)	0.18%
Expected option life in years	6	6
Nominal option life in years	8	8
Share price	52.57	50.98
Exercise price	52.57	50.98
Volatility	29.5%	31%
Expected dividend	3.14%	3.24%
Fair value of option granted	9.36	9.89
Employee options		
Risk-free rate	(0.48%)	(0.12%)
Expected option life in years	2.5	2.5
Nominal option life in years	5	5
Share price	52.57	50.98
Exercise price	52.57	50.98
Volatility	20.0%	20.5%
Expected dividend	3.14%	3.24%
Fair value of option granted	4.38	4.50

An amount of € 24 million is included in the costs for wages and salaries for share-based compensation (2015: € 23 million). The following table specifies the share-based compensation:

Share-based compensation

	2016	2015
Stock options	18	20
Share appreciation rights	1	-
Performance shares	5	3
Total expense	**24**	**23**

28 Related parties

Koninklijke DSM N.V. is the group holding company that is listed on the Euronext Amsterdam stock exchange. The financial statements of the company are included in the chapter 'Parent company financial statements'.

In the ordinary course of business, DSM buys and sells goods and services to various related parties in which DSM has significant influence. Transactions are conducted under terms and conditions that are equivalent to those that apply to arm's length transactions.

Transactions and relationships with related parties are reported in the table below.

Transactions with related parties

	Joint ventures		Associates	
	2016	2015	**2016**	2015
Continuing operations				
Sales to	27	31	43	45
Purchases from	8	10	338	129
Loans to	62	62	191	183
Receivables from	41	61	144	82
Payables to	62	72	163	245
Interest from	4	5	13	5

DSM may issue guarantees as credit enhancement of associates to acquire bank facilities for these associates.
DSM has provided guarantees to third parties for debts of associates for an amount of €75 million (2015: €91 million).

Other related-parties disclosure relates entirely to the key management of DSM, being represented by the company's Managing Board, Executive Committee and Supervisory Board. The total remuneration and related costs of the Managing Board includes fixed annual salary including other items to the amount of €2.9 million (2015: €3.1 million), short-term incentives to the amount of €2.1 million (2015: €1.7 million), pension expenditure amounting to €2.7 million (2015: €0.7 million) and long-term incentives amounting to €2.3 million (2015: €2.3 million). The total remuneration and related costs (including pension expenditures, other commitments, short-term and long-term incentives) of the other members of the Executive Committee amounted to €5.7 million in 2016 (2015: €1.6 million; only 4 months).

For further details about the remuneration of the Managing Board, the Executive Committee and the Supervisory Board, please refer to Note 12 to the 'Parent company financial statements'.

29 Service fees paid to external auditors

The service fees recognized in the financial statements 2016 for the service of KPMG amounted to €4.6 million (2015: €4.0 million). The amounts per service category are shown in the following table.

	Total service fee		Of which	
	KPMG	KPMG	**KPMG NL**	KPMG NL
	2016	2015	**2016**	2015
Audit of the group financial statements	4.1	3.8	2.4	2.0
Audit of other (statutory) financial statements	0.4[1]	0.1	-	-
Other assurance services	0.1	0.1	0.1	0.1
Total assurance services	4.6	4.0	2.5	2.1

1 Statutory audits previously carried out by another auditor

30 Events after the balance sheet date

In January 2017, DSM acquired the technology and other assets of “Sunshine” (Suzhou SunShine New Materials Technology Co., Ltd.), a manufacturer of a novel, high-performance solar photovoltaic (PV) backsheet based on co-extrusion technology. Through this acquisition, DSM will expand its product portfolio for the solar PV market to include polymer backsheets that protect PV solar cells. Sunshine currently has 44 employees and an annual production capacity of 10 million m^2. The initial consideration amounted to €19 million and in addition earn-out payments, depending on future milestones, were included in the agreement reached.

Parent company financial statements

Balance sheet at 31 December of Koninklijke DSM N.V. before profit appropriation

x € million	Notes	2016	2015
Assets			
Non-current assets			
Intangible assets	2	447	450
Property, plant and equipment	3	15	16
Financial assets	4	9,975	9,385
Deferred tax assets	5	173	195
		10,610	**10,046**
Current assets			
Receivables	6	98	121
Cash and cash equivalents		-	41
		98	**162**
Total		**10,708**	**10,208**
Shareholders' equity and liabilities			
Shareholders' equity	7		
Share capital		338	338
Share premium		489	489
Treasury shares		(339)	(319)
Other reserves		(95)	(103)
Retained earnings		5,058	5,048
Profit for the year		621	88
		6,072	**5,541**
Non-current liabilities			
Borrowings	8	2,541	2,541
		2,541	**2,541**
Current liabilities			
Borrowings	8	749	150
Financial derivatives		47	51
Other current liabilities	9	1,299	1,925
		2,095	**2,126**
Total		**10,708**	**10,208**

Income statement of Koninklijke DSM N.V.

x €million	Notes	2016	2015
Other income	1	205	195
Wages and salaries	10	(78)	(61)
Social security and pension charges		(12)	(11)
Amortization of intangible assets and depreciation of property, plant and equipment		(8)	(8)
Cost of outsourced work and other external costs		(95)	(118)
Total operating expenses		(193)	(198)
Operating profit		**12**	**(3)**
Financial income	11	16	61
Financial expense	11	(112)	(150)
Result before income tax		**(84)**	**(92)**
Income tax	5	17	80
Share of the profit of subsidiaries	4	465	36
Profit after income tax		**398**	**24**
Share of the profit of associates and joint ventures	4	(9)	64
Other results related to associates and joint ventures	4	232	-
Net profit attributable to equity holders of Koninklijke DSM N.V.		**621**	**88**

Notes to the parent company financial statements

1 General

Unless stated otherwise, all amounts are in € million.

The Parent company financial statements are the financial statements of Koninklijke DSM N.V., which have been prepared in accordance with accounting principles generally accepted in the Netherlands.

The accounting policies used are the same as those used in the consolidated financial statements, in accordance with the provisions of article 362-8 of Book 2 of the Dutch Civil Code. In these separate financial statements, investments in subsidiaries are accounted for using the net asset value. The balance sheet presentation is aligned with the consolidated financial statements in order to enhance transparency and facilitate understanding.

The statutory seat of DSM is Het Overloon 1, Heerlen (Netherlands). A list of DSM participations has been filed with the Chamber of Commerce (Netherlands) and is available from the company upon request. The list can also be downloaded from the company website. DSM is registered with the Dutch Commercial Register under number 14022069.

Information on the use of financial instruments and on related risks for the group is provided in the 'Notes to the consolidated financial statements of Royal DSM'.

Other income consists mainly of the charged corporate overhead and services to the group companies.

The company forms a fiscal unity for corporate income tax purposes together with the group companies in the Netherlands. Each of the companies recognizes the portion of corporate income tax that the relevant company would owe as an independent tax payer, taking into account the tax liabilities applicable to the company.

2 Intangible assets

The carrying amount of intangible assets mainly comprises goodwill on the acquisition of NeoResins in 2005 (€358 million), Crina in 2006 (€9 million) and Pentapharm in 2007 (€36 million). For further information on these assets including the discussion of the related impairment tests, please refer to Note 8 'Intangible assets' in the 'Notes to the consolidated financial statements of Royal DSM'.

	Goodwill	Under construction	Other	Total
Balance at 1 January 2015				
Cost	398	11	61	470
Amortization and impairment losses	-	-	26	26
Carrying amount	**398**	**11**	**35**	**444**
Change in carrying amount				
- Capital expenditure	-	7	-	7
- Put into operation	-	(1)	1	-
- Amortization	-	-	(6)	(6)
- Exchanged differences	5	-	-	5
- Other reclassifications	-	-	1	1
	5	6	(4)	7
Balance at 31 December 2015				
Cost	403	17	62	482
Amortization and impairment losses	-	-	32	32
Carrying amount	**403**	**17**	**30**	**450**
Change in carrying amount				
- Capital expenditure	-	3	-	3
- Put into operation	-	(16)	16	-
- Amortization	-	-	(6)	(6)
	-	(13)	10	(3)
Balance at 31 December 2016				
Cost	403	4	78	485
Amortization and impairment losses	-	-	38	38
Carrying amount	**403**	**4**	**40**	**447**

3 Property, plant and equipment

This item mainly relates to land and buildings. Capital expenditure in 2016 was nil (2015: €1 million), while the depreciation charge in 2016 was €1 million (2015: €2 million). The historical cost of property, plant and equipment as at 31 December 2016 was €62 million (2015: €62 million); accumulated depreciation amounted to €47 million (2015: €46 million).

4 Financial assets

	Subsidiaries		Associates		Receivables	Total
	Share in equity	Loans	Share in equity	Loans		
Balance at 1 January 2015	**8,933**	**315**	**471**	**51**	**3**	**9,773**
Changes:						
- Share in profit	36	-	64	-	-	100
- Dividend received	(109)	-	(141)	-	-	(250)
- Capital payments	2	-	13	-	-	15
- Net actuarial gains/(losses)	(56)	-	1	-	-	(55)
- Change in Fair value reserve	8	-	-	-	-	8
- Change in Hedging reserve	5	-	1	-	-	6
- Exchange differences	519	-	22	4	-	545
- New loans	-	-	-	3	93	96
- Disposals	(172)	-	-	-	-	(172)
- Transfers	(359)	(315)	51	(55)	(3)	(681)
Balance at 31 December 2015	**8,807**	**-**	**482**	**3**	**93**	**9,385**
Changes:						
- Share in profit	465	-	(9)	-	-	456
- Dividend received	(27)	-	(150)	-	-	(177)
- Capital payments	1	-	-	-	-	1
- Net actuarial gains/(losses)	(3)	-	-	-	-	(3)
- Change in Fair value reserve	7	-	-	-	-	7
- Change in Hedging reserve	1	-	-	-	-	1
- Exchange differences	196	-	9	-	2	207
- Divestments	-	-	128	-	-	128
- Transfers	(14)	-	(28)	(3)	15	(30)
Balance at 31 December 2016	**9,433**	**-**	**432**	**-**	**110**	**9,975**

For movements in Associates see Note 10 to the 'Consolidated financial statements'.

In 2015, transfers and the main part of dividend received and capital payments relate to the restructuring of the legal set-up of financing companies within DSM.

Transfers within Receivables include the earn-out of Patheon of €28 million and the divestment settlements of -€16 million (see Note 11 'Other financial assets' to the Consolidated financial statements.

5 Deferred tax assets

This item mainly relates to net operating losses in the Dutch fiscal unity. In 2016 a tax income of €17 million (2015: €80 million) was included and other movements (mainly settlements with group companies) of -€39 million (2015: -€145 million).

6 Receivables

	2016	2015
Receivable from subsidiaries	83	100
Other receivables / deferred items	15	21
Total	**98**	**121**

7 Shareholders' equity

	2016	2015
Balance at 1 January	**5,541**	**5,723**
Net profit	621	88
Exchange differences, net of income tax	197	16
Net actuarial gains/(losses) on defined benefit obligations	(9)	(54)
Dividend	(296)	(297)
Repurchase of shares	(273)	(122)
Proceeds from reissue of ordinary shares	253	176
Other changes	38	11
Balance at 31 December	**6,072**	**5,541**

For details see the consolidated statement of changes in equity (Note 16) and page 138.

Legal reserve

In Shareholders' equity, an amount of €530 million (2015: €314 million) is included for Translation reserve, -€207 million (2015: -€203 million) for Hedging reserve, €8 million (2015: -€3 million) for Fair value reserve and -€100 million (2015: -€86 million) for intangible assets related to product development projects.
In addition, a legal reserve of €120 million (2015: €111 million) is recognized for profits that cannot be distributed and received in the Netherlands.

Profit appropriation

According to article 32 of the Articles of Association of Koninklijke DSM N.V. and with the approval of the Supervisory Board, every year the Managing Board determines the portion of the net profit to be appropriated to the reserves. For the year 2016 the net profit is €621 million and the amount to be appropriated to the reserves has been established at €311 million. From the subsequent balance of the net profit of €310 million, dividend is first distributed on the cumulative preference shares B. At the end of 2016 no cumprefs B were in issue. Subsequently, a 1.759% dividend is distributed on the cumulative preference shares A, based on a share price of €5.29 per cumulative preference share A. For 2016 this distribution amounts to €0.09 per share, which is €4 million in total. An interim dividend of €0.03 per cumulative preference share A having been paid in August 2016, the final dividend will then amount to €0.06 per cumulative preference share A.

The profit remaining after distribution of these dividends on the cumulative preference shares A (€617 million) will be put at the disposal of the Annual General Meeting of Shareholders in accordance with the provisions of Article 32, section 5 of the Articles of Association.

The Managing Board proposes a dividend on ordinary shares outstanding for the year 2016 of €1.75 per share. With an interim dividend of €0.55 per ordinary share having been paid in August 2016, the final dividend would then amount to €1.20 per ordinary share.

If the Annual General Meeting of Shareholders makes a decision in accordance with the proposal, the net profit will be appropriated as follows:

	2016	2015
Net profit	621	88
Profit appropriation:		
- To be added to / paid from the reserves	311	(210)
- Dividend on cumprefs A	4	10
- Interim dividend on ordinary shares	96	96
- Final dividend distributable on ordinary shares	210	192

8 Borrowings

	2016		2015	
	Total	Of which current	Total	Of which current
Debenture loans	3,290	749	2,541	-
Commercial paper	-	-	150	150
Total	**3,290**	**749**	**2,691**	**150**

At 31 December 2016, there were four debenture loans (€2,241 million, maturing in 2022, 2024, 2025 and 2026) with a remaining term of more than five years (€1,493 million at 31 December 2015).

The repayment schedule for borrowings (excluding commercial paper) is as follows:

Borrowings by maturity

	2016	2015
2017	749	748
2018	-	-
2019	300	300
2020 and 2021	-	-
2022 through 2026	2,241	1,493
Total	**3,290**	**2,541**

In agreements governing loans with a residual amount at year-end 2016 of € 3,290 million, of which € 749 million is of a current nature (31 December 2015: € 2,541 million, of which none of a current nature), clauses have been included which restrict the provision of security. More information on borrowings is provided in Note 20 to the 'Consolidated financial statements', 'Borrowings'.

9 Other current liabilities

	2016	2015
Owing to subsidiaries	1,203	1,840
Other liabilities	91	84
Deferred items	5	1
Total	**1,299**	**1,925**

Contingent liabilities

Guarantee obligations on behalf of affiliated companies and third parties amounted to € 380 million (31 December 2015: € 190 million). Koninklijke DSM N.V. has declared in writing that it accepts several liabilities for debts arising from acts in law of a number of consolidated companies (including relating to the fiscal unity for income tax and VAT). These debts are included in the consolidated balance sheet.

10 Personnel

The average number of employees working for Koninklijke DSM N.V. in 2016 was 376 (2015: 366), all of whom are based in the Netherlands.

11 Financial income and expense

Financial income of € 16 million (2015: € 61 million) mainly consists of interest income relating to a net investment hedge. Financial expense of € 112 million (2015: € 150 million) mainly consists of the interest costs on bonds issued and the counterpart of the net investment hedge. See also Notes 19 and 23 to the 'Consolidated financial statements'.

12 Remuneration of Managing Board and Supervisory Board

Remuneration Managing Board in 2016

As part of its remuneration policy for the Managing Board, DSM benchmarks its remuneration package against the packages offered by the labor-market peer group once every three years.

Base salary in 2016

Adjustment of the base salary is at the discretion of the Supervisory Board. During the Remuneration Committee meeting of 7 December 2015, it was decided to adjust the annual base salary of the members of the Managing Board by 3.5% as of 1 January 2016. This was the first increase in base salary since that applied in 2014, given that, at the Managing Board's request in light of the various cost-reduction programs being set up at the company at the time, the Supervisory Board decided to refrain from an increase in 2015. Since the next moment at which an increase will apply concerns 2017, this 3.5% increase effectively covered the two-year period 2015-2016.

Fixed annual salary

in €	**1 July 2016**	1 July 2015
Feike Sijbesma	900,000	870,000
Geraldine Matchett	590,000	570,000
Stephan Tanda	590,000	570,000
Dimitri de Vreeze	590,000	570,000

Short-Term Incentives (STI) for 2016

STI targets are revised annually so as to ensure that they are stretching but realistic. Considerations regarding the performance targets are influenced by the operational and strategic course taken by the company and are directly linked to the company's ambitions. The targets are determined at the beginning of the year for each Board member.

Target STI level and pay-out

When they achieve all their targets, Managing Board members receive an incentive of 50% of their annual base salary. Outstanding performance can increase the STI level to 100% of the annual base salary.

The 2016 Integrated Annual Report presents the Short-Term Incentives that have been earned on the basis of results achieved in 2016. These Short-Term Incentives will be paid out in 2017.

The Supervisory Board has established the extent to which the targets for 2016 were achieved. Regarding the financial targets, the score on the EBITDA target was between target and maximum achievement, while the score on gross free cash flow was at maximum. The score for net sales growth was below target but above threshold. For the sustainability targets, the score on Brighter Living Solutions was between target and maximum, and the score on the Employee Engagement Index was on target. The Safety Performance score was at maximum. Managing Board members also have individual targets. The scores achieved on these targets were different per person and varying between target and maximum. The realization of the 2016 financial STI targets has been assessed by KPMG. Furthermore, KPMG has assessed the process with respect to the target realization of the non-financial STI targets. The average realization percentage was 73.5-82.5% of base salary.

With the STI Deferral and Share Matching Plan, only part of the STI outcome is paid in cash. 25% of the gross STI value is mandatorily converted into DSM Investment shares. Managing Board members can choose to convert up to a further 25% into additional DSM Investment shares (in 5% increments, with a minimum of 5% and a maximum of 25%).

The company matches these STI Investment shares with an equivalent number of Restricted Share Units (RSUs), vesting of which is deferred for three years, conditional on achieving predefined performance targets equivalent to the measures under the Long-Term Incentive (LTI) Plan. The remainder of the STI gross outcome (50% to maximum 75%) is paid out in cash.

Short-Term Incentives

in €	**2016**[1]	2015[2]
Feike Sijbesma	742,500	522,000
Geraldine Matchett	457,250	342,000
Stephan Tanda	433,650	347,700
Dimitri de Vreeze	457,250	342,000
Stefan Doboczky[3]	-	143,291

1 Based on results achieved in 2016 and therefore payable in 2017
2 Based on results achieved in 2015 and therefore paid in 2016
3 Left DSM to pursue career outside of the company as of 1 June 2015

All members of the Managing Board decided to invest the maximum of 50% of their gross 2015 STI (payable in 2016) in accordance with the STI Deferral and Share Matching Plan. In all cases, these investment shares were matched with an equal number of Restricted Share Units (RSU's). This was also the case with regard to the gross 2016 STI (which will be paid in 2017), with the exception of Stephan Tanda in view of his leaving the company.

Long-Term Incentives (LTI)

The following table provides an overview of the LTI performance shares that were granted to members of the Managing Board in the respective year. These performance shares are subject to a three-year vesting period.

Number of LTI performance shares granted[1]

	2016	2015
Feike Sijbesma	31,000	29,000
Geraldine Matchett	20,500	19,000
Stephan Tanda	20,500	19,000
Dimitri de Vreeze	20,500	19,000

[1] Grant according to Koninklijke DSM N.V. Performance Share Plan

For 2017, the number of conditionally granted ordinary shares under the LTI program will be:
Chairman 23,500
Members 15,500

For an overview of all granted and vested stock options and performance shares see page 202.

In 2016, the Supervisory Board established which proportion of the shares conditionally granted in 2013, vested. The following four performance measures are applicable to the 2013 grant: relative Total Shareholder Return (TSR) versus a peer group, Return on Capital Employed (ROCE), Energy Efficiency Improvement (EEI) and the Greenhouse-gas Emissions (GHGE) reduction over volume-related revenue. Each of these measures determines 25% of the total vesting percentage. The applicable vesting schemes for the three-year vesting period starting in 2013 were published in DSM's 2013 Integrated Annual Report. DSM's TSR performance minus the peer group performance over the vesting period did not result in the vesting of any shares, whilst the performance in terms of GHGE reduction led to full vesting on this measure. Overall this resulted in the vesting of 33% of the total amount of shares granted in 2013.

Pensions in 2016

The members of the Managing Board participate in the Dutch pension fund Stichting Pensioenfonds DSM Nederland (PDN). This pension scheme for the Managing Board is equal to the pension scheme for other DSM employees in the Netherlands. In 2016, a one-off pension contribution was made for the CEO. The current pension plan for DSM in the Netherlands came into effect in 2011. As of 1 January 2015, the Dutch tax treatment of pension contributions changed resulting in a change to the DSM pension plan. As a consequence, DSM now offers two non-qualifying individual defined contribution plans to employees whose pensionable salary exceeds € 101,519 (2016 ceiling) per annum, including the Managing Board.

A. Mandatory plan

- Covers all employees employed in the Netherlands.
- Collective Defined Contribution Scheme: accrual based on fixed contribution. Indexation or reduction of accrued benefits, depending on PDN's coverage ratio.
- The accrual is tax exempt, the benefits will be taxed.
- Based on career-average base pay. Pensionable salary equals base salary up to a maximum of (in 2016) € 101,519 per annum considering a deductible of € 13,415 (in 2016 subject to annual review). Accrual of 1.875% per annum.
- Retirement age 67 (as of 2016).
- The scheme includes a spouses'- and disability pension.
- Employee and employer contributions.

B. Allowance for salary exceeding € 101,519

- Employees whose pensionable salary exceeds € 101,519 receive an age-dependent gross allowance that can be used to participate in a net pension scheme. The allowance is taxed.

Revision and claw-back of bonuses

As in 2015, no revision or claw-back of bonuses occurred in 2016.

Remuneration Managing Board and Executive Committee

The remuneration of the members of the Managing Board is determined by the Supervisory Board within the framework of the remuneration policy as approved by the Annual General Meeting of Shareholders. More details about the remuneration policy are included in the 'Report by the Supervisory Board' from page 114 onwards.

Since 2015, DSM has had an Executive Committee, enabling faster strategic alignment and operational execution by increasing focus on the development of the business, innovation and people. The members of the Executive Committee are the Managing Board members Feike Sijbesma (CEO/Chairman), Geraldine Matchett (CFO), Stephan Tanda (Nutrition) and Dimitri de Vreeze (Materials), as well as Chris Goppelsroeder (Nutritional Products), Philip Eykerman (Strategy and M&A), Rob van Leen (R&D and Innovation) and Peter Vrijsen (People & Organization). The members of the Executive Committee meet the definition of key management personnel.

The total remuneration and related costs (including pension expenditures, other commitments, short- and long-term incentives) of the current members of the Managing Board amounted to € 10.0 million (2015: € 7.8 million). The increase was the result of a higher STI payout due to better performance and a one-time contribution of € 2.2 million regarding the pension of the CEO granted by the Supervisory Board in view of the fact that the CEO's total compensation is clearly below targeted policy level, including salary and pension entitlement. The total remuneration and related costs (including pension expenditures, other commitments, short-term and long-term incentives) of the other members of the Executive Committee amounted to € 5.7 million (2015: € 1.6 million; 4 months) in 2016.

The cost of the remuneration of the individual members of the Managing Board and of the other members of the Executive Committee collectively was as follows:

DSM's remuneration for the Managing Board and the Executive Committee (IFRS defined reported costs for DSM, are not in all cases the compensation paid, nor the cash outflows for DSM)

x € thousand	Salary		Short-term incentive		Pension expenditure[1]		Share-based compensation[2]		Other items[3]		Total	
	2016	2015	**2016**	2015	**2016**[4]	2015	**2016**	2015	**2016**	2015	**2016**	2015
Feike Sijbesma	900	870	743	522	206	180	811	709	50	47	2,710	2,328
					2,200[5]	-					2,200	-
Geraldine Matchett	590	570	457	342	87	72	445	224	77	93	1,656	1,301
Stephan Tanda	590	570	434	348	116	92	531	464	111	62	1,782	1,536
Dimitri de Vreeze	590	570	457	342	100	85	496	372	40	88	1,683	1,457
Stefan Doboczky[6]	-	238	-	143	-	249[7]	-	576	-	4	-	1,210
Total Managing Board	**2,670**	**2,818**	**2,091**	**1,697**	**2,709**	**678**	**2,283**	**2,345**	**278**	**294**	**10,031**	**7,832**
Other members of the Executive Committee[8]	1,950	674	1,489	345	408	119	1,255	399	615	41	5,717	1,578
Total Executive Committee	**4,620**	**3,492**	**3,580**	**2,042**	**3,117**	**797**	**3,538**	**2,744**	**893**	**335**	**15,748**	**9,410**

1 The employers' pension expenditure increased due to an adjustment of the employer/employee ratio, not impacting the overall contribution to the net pension scheme.
2 Share-based compensation expense represents the non-cash cost for DSM of performance shares awarded to members of the Managing Board and stock options to other members of the Executive Committee. These costs are recognized over the vesting period of the performance shares and stock options and therefore cover several years. The vested shares/options can be lower than the granted amount.
3 Other items include company car and allowances.
4 The pension expenditure contains an age-dependent contribution for the salary exceeding € 101,519. For employees with a higher age, a higher contribution level is applicable.
5 This amount is a one-time additional pension contribution.
6 Left DSM to pursue career outside of the company as of 1 June 2015.
7 This amount includes € 212,645 in relation to the settlement of a pension arrangement.
8 From 1 September 2015 onwards.

Outstanding and exercised stock incentives

The following table shows the stock incentives of the individual members of the Managing Board and the rights exercised.

Overview of stock options

	Year of issue	Outstanding at 31 Dec. 2015	In 2016 Granted	In 2016 Exercised	In 2016 Forfeited/ expired	Outstanding[1] at 31 Dec. 2016	Average share price at exercise (€)	Exercise price (€)	Expiry date
Feike Sijbesma	2008	28,125	-	(28,125)	-	-	47.00	29.79	28 Mar 2016
	2009	18,750	-	(18,750)	-	-	59.57	21.10	27 Mar 2017
	Total	**46,875**	**-**	**(46,875)**	**-**	**-**			
	Of which vested	46,875				-			
Stephan Tanda	2008	22,500	-	(22,500)	-	-	47.00	29.79	28 Mar 2016
	2009	15,000	-	(15,000)	-	-	60.00	21.10	27 Mar 2017
	Total	**37,500**	**-**	**(37,500)**	**-**	**-**			
	Of which vested	37,500				-			
Dimitri de Vreeze	2008	22,500	-	(22,500)	-	-	47.10	29.79	28 Mar 2016
	2009	18,000	-	(18,000)	-	-	60.75	21.10	27 Mar 2017
	2010	18,000	-	-	-	18,000		33.10	6 Apr 2018
	2011	18,000	-	-	-	18,000		46.20	2 May 2019
	2012	12,000	-	-	-	12,000		40.90	15 May2020
	2013	36,000	-	-	(24,000)	12,000		48.91	7 May 2021
	Total	**124,500**	**-**	**(40,500)**	**(24,000)**	**60,000**			
	Of which vested	88,500				60,000			

[1] Geraldine Matchett does not hold any stock options

Since 2010, the Managing Board has been granted LTI performance shares instead of stock options.

Overview of performance shares

	Year of issue	Outstanding at 31 Dec. 2015	In 2016 Granted	Vested	Forfeited / expired	Outstanding at 31 Dec. 2016	Share price at date of grant (€)
Feike Sijbesma	2013	24,000	-	(8,000)	(16,000)	-	48.91
	2014	28,822	-	-	-	28,822	49.88
	2015	32,051	-	-	-	32,051	52.58
	2016	-	36,350	-	-	36,350	48.79
	Total	**84,873**	**36,350**	**(8,000)**	**(16,000)**	**97,223**	
Retained shares originated from performance shares						66,624	
Geraldine Matchett	2015	27,008	-	-	-	27,008	52.58
	2016	-	24,006	-	-	24,006	48.79
	Total	**27,008**	**24,006**	**-**	**-**	**51,014**	
Retained shares originated from performance shares						-	
Stephan Tanda	2013	16,000	-	(5,334)	(10,666)	-	48.91
	2014	18,990	-	-	-	18,990	49.88
	2015	20,511	-	-	-	20,511	52.58
	2016	-	24,064	-	-	24,064	48.79
	Total	**55,501**	**24,064**	**(5,334)**	**(10,666)**	**63,565**	
Retained shares originated from performance shares						37,350	
Dimitri de Vreeze	2014	16,910	-	-	-	16,910	49.88
	2015	20,836		-	-	20,836	52.58
	2016	-	24,005	-	-	24,005	48.79
	Total	**37,746**	**24,005**	**-**	**-**	**61,751**	
Retained shares originated from performance shares						-	

Purchasing shares

In addition to the performance shares granted under the DSM Stock Incentive Plan, the current members of the Managing Board have themselves invested in DSM shares.

All members of the Managing Board have purchased shares in the company to emphasize their confidence in the strategy and the company. At 31 December 2016, the members of the Managing Board together held 198,290 (2015: 161,853) shares in Koninklijke DSM N.V. These shares were bought through private transactions with private funds (including shares bought from earned STI) and obtained through vested performance shares.

Managing Board holdings of DSM shares

	31 December 2016			31 December 2015		
	Ordinary shares purchased with private money	Holdings from vested performance shares	Total holdings	Ordinary shares purchased with private money	Holdings from vested performance shares	Total holdings
Feike Sijbesma	58,376	66,624	125,000	48,973	58,624	107,597
Geraldine Matchett	4,384	-	4,384	878	-	878
Stephan Tanda	18,065	37,350	55,415	14,501	33,721	48,222
Dimitri de Vreeze	13,491	-	13,491	4,886	-	4,886
Stefan Doboczky[1]	n.a.	n.a.	n.a.	n.a.	24,017	n.a.
Rolf-Dieter Schwalb[2]	n.a.	n.a.	n.a.	n.a.	53,832	n.a.
Total holdings	**94,316**	**103,974**	**198,290**	**69,238**	**170,194**	**161,583**

1 Left DSM to pursue career outside of the company as of 1 June 2015
2 Retired as member of the Managing Board as of 1 December 2014

Loans
The company does not provide any loans to members of the Managing Board.

Supervisory Board remuneration in 2016
The remuneration package for the Supervisory Board comprises an annual fixed fee and an annual committee membership fee. In addition, Supervisory Board members receive an intercontinental travel allowance for each meeting that they attend outside their continent of residence. At the Annual General Meeting held on 29 April 2016, an increase of these fees and travel allowance was approved and applied as of that date. The intercontinental travel allowance is €4,000 (2015: €3,000) per meeting.

The fixed fee per appointed year for the Chairman of the Supervisory Board is €85,000 (2015: €70,000). The other members of the Supervisory Board each receive a fixed fee of €60,000 (2015: €50,000). Audit Committee membership is awarded €10,000 per member and €15,000 (2015: €12,500) for the Chairman. Nomination Committee, Remuneration Committee and Sustainability Committee membership is awarded €7,000 (2015: €5,000) per member and €10,000 (2015: €7,500) for the Chairman.

Overview of remuneration awarded to the Supervisory Board in 2016
The total remuneration (annual fixed fee, annual committee membership fee and other costs such as the intercontinental travel allowance) of the members of the Supervisory Board amounted to €0.6 million (2015: €0.5 million).

The remuneration of the individual members of the Supervisory Board was as follows:

	Annual fixed fee	Committee fee	Other costs	Total	Total
				2016	2015
Rob Routs, Chairman	80,000	15,500	1,250	96,750	83,750
- Chairman Nomination Committee					
- Member Remuneration Committee					
Tom de Swaan, Deputy Chairman as of 29 April 2016	56,667	20,500	2,437	79,604	69,954
- Chairman Audit Committee					
- Member Remuneration Committee					
Victoria Haynes	56,667	14,667	16,250	87,584	79,250
- Member Audit Committee					
- Member Remuneration Committee as of 29 April 2016					
Pierre Hochuli	56,667	16,333	1,250	74,250	66,250
- Member Audit Committee					
- Member Sustainability Committee					
Eileen Kennedy	56,667	13,000	24,250	93,917	74,250
- Chairman Sustainability Committee as of 29 April 2016 (member until 29 April 2016)					
- Member Nomination Committee as of 29 April 2016					
Ewald Kist, Deputy Chairman until 29 April 2016	16,667	4,167	906	21,740	64,954
- Chairman Remuneration Committee					
- Member Nomination Committee					
Pauline van der Meer Mohr	56,667	15,500	2,437	74,604	64,954
- Chairman Remuneration Committee as of 29 April 2016					
- Chairman Sustainability Committee until 29 April 2016					
- Member Nomination Committee					
Pradeep Pant	40,000	11,333	20,938	72,271	-
- Member Audit Committee as of 29 April 2016					
- Member Sustainability Committee					
Total	**420,002**	**111,000**	**69,718**	**600,720**	**503,362**
Total 2015	370,000	85,000	48,362	503,362	

At year-end 2016, three members of the Supervisory Board held shares in Koninklijke DSM N.V.: Pierre Hochuli 7,210 (2015: 7,210), Victoria Haynes 300 (2015: 300) and Pauline van der Meer Mohr 1,029 (2015: 0).

Loans

The company does not provide any loans to members of the Supervisory Board.

Heerlen, 2 March 2017

Managing Board,

Feike Sijbesma, CEO/Chairman
Geraldine Matchett, CFO
Dimitri de Vreeze

Heerlen, 2 March 2017

Supervisory Board,

Rob Routs, Chairman
Tom de Swaan, Deputy Chairman
Victoria Haynes
Pierre Hochuli
Eileen Kennedy
Pauline van der Meer Mohr
Pradeep Pant

Other information

Independent auditor's report

To: the Annual General Meeting of Shareholders and the Supervisory Board of Koninklijke DSM N.V.

Report on the accompanying financial statements 2016

Our opinion

In our opinion:

- the accompanying consolidated financial statements give a true and fair view of the financial position of Koninklijke DSM N.V. (hereafter: Royal DSM) as at 31 December 2016, and of its result and its cash flows for 2016 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Netherlands Civil Code;
- the accompanying parent company financial statements give a true and fair view of the financial position of Royal DSM as at 31 December 2016, and of its result for 2016 in accordance with Part 9 of Book 2 of the Netherlands Civil Code.

What we have audited

We have audited the financial statements 2016 of Royal DSM, based in Heerlen, the Netherlands. The financial statements include the consolidated financial statements and the parent company financial statements.

The consolidated financial statements comprise:

- the consolidated balance sheet as at 31 December 2016;
- the following consolidated statements for 2016: the income statement, the statement of comprehensive income, the statement of changes in equity and cash flow statement; and
- the notes comprising a summary of the significant accounting policies and other explanatory information.

The parent company financial statements comprise:

- the parent company balance sheet as at 31 December 2016;
- the parent company income statement for 2016; and
- the notes comprising a summary of the accounting policies and other explanatory information.

Basis for our opinion

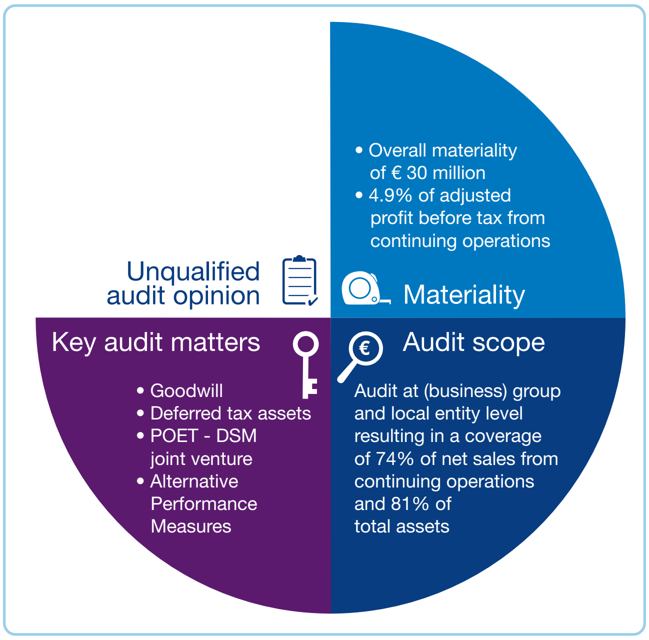
We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of Royal DSM in accordance with the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Audit approach

Summary



Materiality

Based on our professional judgment we determined the materiality for the financial statements as a whole at € 30 million (2015: € 25 million). The materiality is determined with reference to Adjusted profit before tax from continuing operations (Note 2: € 609 million; 2015: € 427 million) of which it represents 4.9% (2015: 5.9%). In addition, the appropriateness of the materiality was assessed by comparing the amount to consolidated net sales from continuing operations of which it represents 0.4% (2015: 0.3%). We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

We agreed with the Supervisory Board that misstatements in excess of € 1 million (2015: € 1 million), which are identified during the audit, are reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Scope of the group audit

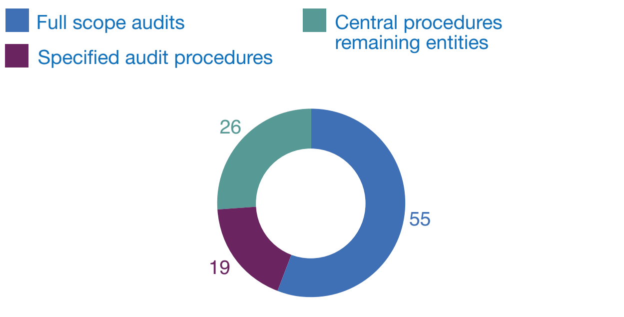
Royal DSM is head of a group of reporting entities (hereafter: entities). The financial information of this group is included in the consolidated financial statements of Royal DSM.

Because we are ultimately responsible for the auditor's report, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for entities reporting for group audit purposes. Decisive were the size and/ or the risk profile of the entities or operations. On this basis, we selected 27 entities (2015: 29 entities) to perform audits for group reporting purposes on a complete set of financial information as well as 14 entities (2015: 16 entities) to perform specified audit procedures for group reporting purposes on specific items of financial information.

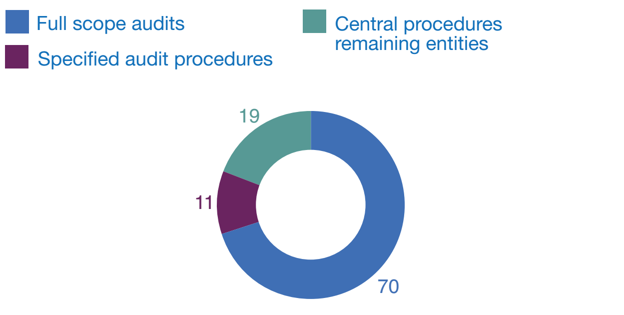
This resulted in a coverage of 74% (2015: 74%) of total net sales from continuing operations and 81% (2015: 75%) of total assets. The remaining 26% of total net sales from continuing operations (2015: 26%) and 19% of total assets (2015: 25%) is represented by a significant number of entities ('Remaining entities') none of which individually represents more than 2% of total net sales from continuing operations and 1% of total assets.

For these remaining entities, we performed amongst others analytical procedures at (business) group level to validate our assessment that there are no significant risks of material misstatement within these entities.

Total sales from continuing operations
in %



Total assets
in %



We have:

- performed audit procedures ourselves at (business) group level in respect of areas such as the annual goodwill impairment tests, other (in)tangible asset impairments, accounting for associates and joint ventures, valuation of deferred tax assets, acquisitions, restructurings, treasury and shared service centers;
- used the work of local KPMG auditors when auditing or performing specified audit procedures at business group and local entity level and Royal DSM's investment in POET-DSM Advanced Biofuels LLC;
- used the work of local non-KPMG auditors when auditing Royal DSM's investments such as Patheon, DSM Sinochem Pharmaceuticals, Ltd and ChemicaInvest Holding B.V.

The group audit team has set materiality levels for the entities, which ranged from €5 million to €12.5 million (2015: €5 million to €12.5 million), based on the mix of size and risk profile of the entities within the group.

The group audit team provided detailed instructions to all business group and local entity auditors part of the group audit, covering the significant audit areas, including the relevant risks of material misstatement, and the information required to be reported back to the group audit team. The group audit team visited entity locations in the United States of America, Switzerland and the shared service center in India (2015: United States of America, Switzerland, China, Brazil and the shared service center in India). Also Royal DSM's investments in Patheon, POET-DSM Advanced Biofuels LLC and ChemicaInvest Holding B.V. (2015: Patheon, POET-DSM Advanced Biofuels LLC) were visited by the group audit team. Telephone conferences were held with all entity auditors part of the group audit. During these visits and telephone conferences, we discussed the audit approach and the audit findings and observations reported to the group audit team. For a number of these entities we also performed file reviews.

By performing the procedures mentioned above at reporting entities, together with additional procedures at (business) group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the financial statements.

Our key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Compared to last year we have added as a key audit matter the valuation of joint venture POET-DSM Advanced Biofuels LLC. Last year's key audit matters about the Transition as auditor and the Assessment of the loss on disposal of the Polymer Intermediates and Composite Resins business are not included anymore in 2016, given the one-off nature of these matters in 2015.

Valuation of goodwill

Description

Royal DSM carries a significant amount of goodwill on the balance sheet. Under EU-IFRSs, the Company is required to test the amount of goodwill for impairment at least annually. In case of impairment triggers, goodwill requires impairment testing as well. The impairment tests were significant to our audit due to the complexity of the assessment process and judgments and assumptions involved, which are affected by expected future market and economic developments.

Our response

We challenged the cash flow projections included in the annual goodwill impairment tests. Our audit procedures included, amongst others, the involvement of a valuation specialist to assist us in evaluating the assumptions, in particular the terminal growth and pre-tax discount rates, and the valuation methodology used by Royal DSM. We furthermore assessed the appropriateness of other data used by comparing them to external and historical data, such as external market growth expectations and by analyzing sensitivities in Royal DSM's valuation model. We specifically focused on the sensitivity in the available headroom for the cash generating units, evaluating whether a reasonably possible change in assumptions could cause the carrying amount to exceed its recoverable amount and assessed the historical accuracy of management's estimates. We assessed the adequacy of the disclosures (Note 8) to the financial statements.

Our observations

We consider management's key assumptions and estimates to be within the acceptable range and we assessed the disclosure (Note 8) to the financial statements being proportionate. We note that Royal DSM concluded from its impairment test that the headroom for the cash generating unit DSM Biomedical is limited and sensitive to changes in the assumptions.

Valuation of deferred tax assets

Description

The group has a significant amount of deferred tax assets, mainly resulting from net operating losses. The valuation of deferred tax assets is significant to our audit because the assessment process is complex and is based on estimates of future taxable income. The risk exists that future (fiscal) profits will not be sufficient to recover all or part of these deferred tax assets. Management has supported the recoverability of the deferred tax assets mainly with taxable income projections which contain estimates of and tax strategies for future taxable income. Changes in for example the industrial footprint, the business and its markets and changes in regulations may impact these projections.

Our response

In this area, our audit procedures included, amongst others, using our own tax specialists to assist us in assessing the appropriateness of the level of deferred taxes recognised in the balance sheet. We paid attention to the long-term forecasts and critically assessed the assumptions and judgments underlying these forecasts by considering the historical accuracy of forecasts and the sensitivities of the profit forecasts. We assessed the adequacy of the income tax disclosures (Note 7) to the financial statements, setting out the basis of the deferred tax balance and the level of estimation involved.

Our observations

We found that the assumptions and estimates were within the acceptable range and that the disclosures (Note 7) were proportionate.

Valuation of joint venture POET-DSM Advanced Biofuels LLC

Description

Royal DSM has a 50% investment in POET-DSM Advanced Biofuels amounting to € 117 million as at 31 December 2016. This investment is classified as joint venture in accordance with IFRS 11 and accounted for using the equity method. The POET-DSM Advanced Biofuels joint venture is a start-up entity which experiences delays in the start-up of the factory. As in 2015, management concluded that delays in the start-up of the factory triggered an impairment test. This impairment test required significant management judgment in determining the expected cash flows to calculate the recoverable amount. Changes in, for example, projected volumes, related variable costs and the anticipated market price for bio-ethanol may impact the future cash flow projections.

Our response

In our audit we assessed and tested the assumptions, methodologies, the weighted average cost of capital and other data used, for example by comparing them to external data. Key assumptions tested by us are expectations of revenue growth, margin improvements as a result of anticipated improvements in the factory, developments of the market price for bio-ethanol and anticipated continuation of the US renewable fuel standard subsidy program after 2022. We furthermore analyzed sensitivities in Royal DSM's valuation model. We included in our team valuation specialists to assist us with these procedures. We specifically focused on the sensitivities by evaluating whether a reasonably possible change in assumptions could cause the carrying amount to exceed its recoverable amount.

We assessed the adequacy of the disclosure in Note 10 to the financial statements.

Our observations

We consider management's key assumptions and estimates to be within the acceptable range and we assessed the disclosures (Note 10) to the financial statements as being proportionate. We note that Royal DSM concluded from its impairment test that the headroom for joint venture POET-DSM Advanced Biofuels LLC is limited and sensitive to changes in the assumptions.

Alternative performance measures

Description

As in prior years, DSM makes use of Alternative performance measures which are not defined by EU-IFRS. Compared with last year, Royal DSM has changed its presentation of exceptional items in the income statement, which does not include alternative performance measures anymore. These Alternative performance measures are now disclosed in Note 2 to the financial statements. The presentation of Alternative performance measures was significant to our audit, given the size and nature of the amounts involved and the prominence given to the Alternative performance measures by management.

Our response

We assessed the appropriateness of the basis for the adjustments between the EU-IFRS income statement and the Alternative performance measures and the consistent application thereof as defined in Note 2 to the financial statements. We tested these adjustments, through examination of the audit evidence obtained relating to the underlying transactions and discussions with management.

Our observations

We consider that there is adequate disclosure of the nature and amounts of adjustments in accordance with the definition as described in Note 2, and determined that the definition of these adjustments is consistently applied.

Report on the other information included in the Integrated Annual Report

In addition to the financial statements and our auditor's report thereon, the Integrated Annual Report contains other information that consists of:

- Report by the Managing Board;
- Corporate governance and risk management report;
- Report by the Supervisory Board;
- Other information pursuant to Part 9 of Book 2 of the Netherlands Civil Code;
- Five-year summary of key figures.

Based on the below procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements;
- contains the information as required by Part 9 of Book 2 of the Netherlands Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Netherlands Civil Code and the Dutch Standard on Auditing 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

The Managing Board is responsible for the preparation of the other information, including the Report by the Managing Board in accordance with Part 9 of Book 2 of the Netherlands Civil Code and other Information pursuant to Part 9 of Book 2 of the Netherlands Civil Code.

Report on other legal and regulatory requirements

Engagement

We were appointed by the Annual General Meeting of Shareholders as auditor of Royal DSM on 7 May 2014, as of the audit for year 2015 and have operated as statutory auditor since then.

Description of the responsibilities for the financial statements

Responsibilities of the Managing Board and the Supervisory Board for the financial statements

The Managing Board is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and with Part 9 of Book 2 of the Netherlands Civil Code. Furthermore, the Managing Board is responsible for such internal control as the Managing Board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to errors or fraud.

As part of the preparation of the financial statements, the Managing Board is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting framework mentioned, the Managing Board should prepare the financial statements using the going concern basis of accounting unless the Managing Board either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. The Managing Board should disclose events and circumstances that may cast significant doubt on the company’s ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the company’s financial reporting process, amongst other things.

Our responsibilities for the audit of financial statements

Our objective is to plan and perform the audit to obtain sufficient and appropriate audit evidence for our opinion. Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud during the audit.

Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

For a further description of our responsibilities in respect of an audit of financial statements, we refer to the website of the professional body for accountants in the Netherlands (NBA). https://www.nba.nl/Documents/Tools%20Vaktechniek/Standaardpassages/Standaardpassage_nieuwe_controletekst_oob_variant_%20Engels.docx.

Amstelveen, 2 March 2017

KPMG Accountants N.V.

E.H.W. Weusten RA

Independent auditor's assurance report

To: the Annual General Meeting of Shareholders and the Supervisory Board of Koninklijke DSM N.V.

Independent Auditor's Assurance Report 2016

Our conclusion

We have reviewed the sustainability information in the sections: 'Nourishing the Base of the Pyramid', 'DSM and the Sustainable Development Goals', 'Strategy 2018: *Driving Profitable Growth*', 'How DSM creates value for its stakeholders', 'Brighter Living Solutions', 'Stakeholder engagement', 'People in 2016', 'Planet in 2016', and 'Sustainability statements', as included in the Integrated Annual Report (hereafter: the Selected Sustainability Information) over the year 2016 of Koninklijke DSM N.V. (hereafter: Royal DSM), based in Heerlen, the Netherlands.

Based on our review, nothing has come to our attention to indicate that the Selected Sustainability Information is not presented, in all material respects, in accordance with the GRI Sustainability Reporting Standards and the internally developed criteria as described in the section 'Reporting policy' on page 91.

The Selected Sustainability Information includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherently the actual future results may differ from these and are therefore uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Selected Sustainability Information.

Basis for our conclusion

We have performed our review on the Selected Sustainability Information in accordance with Dutch law, including Dutch Standard 3810N: Assurance engagements relating to sustainability reports, which is a specified Dutch standard that is based on the International Standard on Assurance Engagements (ISAE) 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information.

This review engagement aims to obtain limited assurance. Our responsibilities under this standard are further described in the section 'Our responsibilities for the review of the Selected Sustainability Information' below.

We are independent of Koninklijke DSM N.V. in accordance with the "Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten" (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe that the review evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Report on the sustainability information included in other parts of the Integrated Annual Report

In addition to the Selected Sustainability Information and our assurance report thereon, the Integrated Annual Report contains other sustainability information.

Based on the following procedures performed, we conclude that the sustainability information included in other parts of the Integrated Annual Report is consistent with the Selected Sustainability Information and does not contain material misstatements.

We have read the other parts of the Integrated Annual Report. Based on our knowledge and understanding obtained through our review of the Selected Sustainability Information, we have considered whether the sustainability information included in other parts of the Integrated Annual Report contains material misstatements.

The scope of the procedures performed is substantially less than the scope of those performed in our review of the Selected Sustainability Information.

Responsibilities of Management for the Selected Sustainability Information

The Managing Board of Royal DSM is responsible for the preparation of the Selected Sustainability Information in accordance with the GRI Sustainability Reporting Standards and the internally developed criteria as described in the section 'Reporting policy' on page 91.

The Managing Board is also responsible for such internal control as it determines is necessary to enable the preparation of the Selected Sustainability Information that is free from material misstatement, whether due to fraud or error.

Our responsibility for the review of the Selected Sustainability Information

Our responsibility is to plan and perform the review assignment in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

A review is aimed to obtain a limited level of assurance. Procedures performed to obtain a limited level of assurance are aimed at determining the plausibility of information and are less extensive than those in a reasonable assurance engagement. The level of assurance obtained in review engagements is therefore substantially less than the level of assurance obtained in an audit engagement.

We apply the "Nadere voorschriften accountantskantoren ter zake van assurance opdrachten (RA)" (Regulations for Audit Firms Regarding Assurance Engagements) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the Selected Sustainability Information. The materiality affects the nature, timing and extent of our review procedures and the evaluation of the effect of identified misstatements on our conclusion.

We have exercised professional judgement and have maintained professional scepticism throughout the review, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our main procedures consisted of:

- Performing an analysis of the external environment, obtaining an understanding of relevant social trends and issues, and of the organization's business;
- Evaluating the appropriateness of the reporting criteria and its consistent application, including the evaluation of the reasonableness of management's estimates;
- Evaluating the design and implementation of the reporting systems and processes related to the information in the Selected Sustainability Information;
- Interviewing management and relevant staff at corporate and business group level responsible for the sustainability strategy and policy;
- Interviewing relevant staff responsible for providing the Selected Sustainability Information, carrying out internal control procedures on the data and consolidating the data in the Selected Sustainability Information;
- A limited number of visits to production sites to review the source data and the design and implementation of internal controls and validation procedures at local level;
- An analytical review of the data and trends submitted for consolidation at corporate level;
- Reviewing relevant data and evaluating internal and external documentation, based on limited sampling, to assess the accuracy of the information in the Selected Sustainability Information; and
- Reviewing the results of procedures performed by the Corporate Operational Audit department of Royal DSM with respect to sustainability information.

Amstelveen, 2 March 2017

KPMG Accountants N.V.

E.H.W. Weusten RA

Special statutory rights

DSM Preference Shares Foundation

The DSM Preference Shares Foundation was established in 1989.

By virtue of DSM's Articles of Association, 375,000,000 cumulative preference shares B can be issued. The listing prospectus of 1989 stated that if, without the approval of the Managing Board and Supervisory Board, either a bid is made for the ordinary shares or a significant participation in ordinary shares is built up, or such an event is likely to occur, then these preference shares B may be issued, which shall have the same voting rights as the ordinary shares.

Under an agreement entered into in 1999, and subsequently amended, between the DSM Preference Shares Foundation and DSM, the Foundation has the right to acquire such preference shares (call option) to a maximum corresponding to 100% of the capital issued in any form other than preference shares B, less one.

The objective of the Foundation is to promote the interest of DSM, and the enterprise maintained by DSM and all parties connected therewith, whereby influences that would threaten the continuity, independence or identity, contrary to the aforementioned interests, are resisted to the maximum extent possible.

The purpose of the agreement with the Foundation is, among other things, for the Foundation to allow DSM the opportunity to determine its position, for example with regard to a possible bidder for DSM shares or a party or parties tempting to obtain (de facto) control, to examine any plans in detail and, to the extent applicable, to look for (better) alternatives. Preference shares B will not be outstanding longer than necessary. As soon as there are no longer any reasons for the preference shares B to remain outstanding, the Managing Board will convene a General Meeting of Shareholders and recommend the cancellation of the preference shares B that are still outstanding.

The Foundation acquired no preference shares B in 2016.

The DSM Preference Shares Foundation is an independent legal entity within the meaning of article 5:71, first paragraph, under c of the Dutch Act on Financial Supervision *(Wet op het financieel toezicht).*

On 31 December 2016, the board of the Foundation was composed as follows:

Gerard Kleisterlee, Chairman
Cees Maas, Vice-Chairman
Mick den Boogert

Important dates

Annual General Meeting of Shareholders

The Annual General Meeting of Shareholders is to be held at the DSM head office in Heerlen (Netherlands) on Wednesday, 3 May 2017 at 14:00 hours CET.

Important dates	
Publication of first-quarter results	Tuesday, 2 May 2017
Ex-dividend quotation	Friday, 5 May 2017
Publication of second-quarter results	Tuesday, 1 August 2017
Publication of third-quarter results	Thursday, 2 November 2017

DSM figures: five-year summary

Balance sheet

x € million	2016[1]	2015[1]	2014[1]	2013	2012
Assets					
Intangible assets	3,188	3,228	2,867	2,690	2,793
Property, plant and equipment	3,325	3,171	3,673	3,611	3,811
Deferred tax assets	355	366	427	364	340
Share in associates and joint ventures	586	644	617	247	27
Other financial assets	463	419	275	200	154
Non-current assets	**7,917**	**7,828**	**7,859**	**7,112**	**7,125**
Inventories	1,800	1,627	1,739	1,638	1,803
Current receivables	1,653	1,556	1,769	1,597	1,799
Financial derivatives	40	47	47	126	62
Current investments	944	9	6	19	12
Cash and cash equivalents	604	665	669	770	1,121
	5,041	3,904	4,230	4,150	4,797
Assets held for sale	-	11	37	637	44
Current assets	**5,041**	**3,915**	**4,267**	**4,787**	**4,841**
Total assets	**12,958**	**11,743**	**12,126**	**11,899**	**11,966**
Equity and liabilities					
Shareholders' equity	6,072	5,541	5,723	5,908	5,874
Non-controlling interests	108	90	213	188	168
Equity	**6,180**	**5,631**	**5,936**	**6,096**	**6,042**
Deferred tax liabilities	278	319	365	375	236
Employee benefits liabilities	490	496	479	326	388
Provisions	128	98	105	97	125
Borrowings	2,552	2,557	1,637	1,725	1,922
Other non-current liabilities	158	228	81	75	94
Non-current liabilities	**3,606**	**3,698**	**2,667**	**2,598**	**2,765**
Employee benefits liabilities	40	44	45	34	42
Provisions	54	41	42	65	81
Borrowings	853	253	1,143	841	642
Financial derivatives	253	232	362	190	299
Current liabilities	1,972	1,842	1,915	1,845	2,081
	3,172	2,412	3,507	2,975	3,145
Liabilities held for sale	-	2	16	230	14
Current liabilities	**3,172**	**2,414**	**3,523**	**3,205**	**3,159**
Total equity and liabilities	**12,958**	**11,743**	**12,126**	**11,899**	**11,966**

[1] Application of IFRS 11 'Joint Arrangements' that came into effect from 1 January 2014. 2013 has been restated. The year 2012 has not been restated.

Income statement

x € million	**2016**	2015	2014	2013	2012
Net sales	7,920	8,935	9,283	9,429	9,131
Adjusted EBITDA	1,262	1,170	1,166	1,312	1,109
EBITDA	1,146	1,046	1,134	1,187	941
Adjusted operating profit (EBIT)	791	650	617	773	635
Operating profit (EBIT)	657	304	290	476	441
Financial income and expense	(133)	(174)	(125)	(144)	(109)
Income tax expense	(89)	(68)	(7)	(76)	(46)
Share of the profit of associates and joint ventures	194	30	(59)	13	2
Profit for the year	**629**	**92**	**99**	**269**	**288**
Profit attributable to non-controlling interests	8	4	(46)	(2)	10
Net profit attributable to equity holders of Koninklijke DSM N.V.	**621**	**88**	**145**	**271**	**278**
Dividend on cumulative preference shares	(4)	(10)	(10)	(10)	(10)
Net profit available to holders of ordinary shares	**617**	**78**	**135**	**261**	**268**
Key figures and financial ratios					
Capital employed[1]	7,889	7,553	8,105	8,060	8,084
Capital expenditure:					
- Intangible assets and Property, plant and equipment	485	570	616	694	715
- Acquisitions	16	106	-	424	1,265
Disposals	87	307	93	78	46
Depreciation, amortization and impairments	489	742	798	730	500
Net debt	(2,070)	(2,321)	(2,420)	(1,841)	(1,668)
Dividend	310	297	296	297	263
Workforce at 31 December, headcount	20,786	20,796	21,351	23,485	23,498
Employee benefits costs (x € million)	1,752	1,778	1,713	1,822	1,761
Financial ratios[1]					
- ROCE in %	10.4	8.2	7.8	9.6	8.9
- Net sales / average capital employed	1.04	1.13	1.17	1.18	1.29
- Current assets / current liabilities	1.58	1.62	1.21	1.49	1.53
- Equity / total assets	0.48	0.48	0.49	0.51	0.50
- Gearing (net debt / equity plus net debt)	0.25	0.29	0.29	0.23	0.22
- Adjusted EBIT / net sales in %	10.0	7.3	6.6	8.2	7.0
- Net profit / average Shareholders' equity available to holders of ordinary shares in %	11.1	1.4	2.4	4.5	4.8
- Adjusted EBITDA / Financial income and expense	9.5	7.4	9.9	9.6	10.2

[1] Before reclassification to held for sale

Information about ordinary DSM shares

per ordinary share in €	**2016**	2015	2014	2013	2012
Adjusted Net profit	2.90	2.14	2.34	2.84	2.52
Net profit	3.52	0.45	0.78	1.52	1.62
Operating cash flow	5.79	3.93	4.62	5.74	4.35
Dividend:	1.75[1]	1.65	1.65	1.65	1.50
- Interim dividend	0.55	0.55	0.55	0.50	0.48
- Final dividend	1.20	1.10	1.10	1.15	1.02
Pay-out including dividend on cumulative preference shares as % of Adjusted net profit	60	71	71	59	60
Dividend yield (dividend as % of average price of an ordinary DSM share)	3.3	3.4	3.3	3.2	3.7
Share prices on Euronext Amsterdam (closing price):					
- Highest price	64.18	55.11	57.97	59.75	46.29
- Lowest price	41.40	39.62	44.44	43.93	36.33
- At 31 December	56.96	46.28	50.64	57.16	45.79
(x 1,000)					
Number of ordinary shares outstanding:					
- At 31 December	175,002	174,923	173,537	173,963	168,684
- Average	175,100	174,357	172,605	172,183	165,543
Daily trading volumes on Euronext Amsterdam:					
- Average	787	912	801	728	823
- Lowest	152	130	104	95	225
- Highest	2,554	4,506	7,981	3,049	2,720

[1] Subject to approval by the Annual General Meeting of Shareholders

Explanation of some concepts and ratios

PEOPLE

Eubiotics
Eubiotics is the science of hygienic and healthy living. The term is used to refer to a healthy balance of the micro-flora in the gastrointestinal tract.

Frequency Index (FI)
The Frequency Index is a way to measure safety performance. The number of accidents of a particular category per 100 employees per year.

Inclusion Index
The Inclusion Index is a subset of items in the Employee Engagement (Pulse) Survey to specifically measure Inclusion. Inclusion is: “A working environment where all employees are a full and equal member of a team; where diverse perspectives are valued, and investment is made in their development; where people are respected and able to contribute as they are and not having to conform; where they can reach their potential, and where they can speak up without fear of retribution."

LWC-rate DSM own
The LWC-rate DSM own is the number of lost workday cases per 100 DSM employees in the past 12 months:
LWC-rate = 100 * (number of LWCs (past 12 months) / average effective manpower (past 12 months)).

Occupational Health Case
This refers to any abnormal condition or disorder requiring medical treatment – other than one resulting directly from an accident – caused by, or mainly caused by, repeated exposure to work-related factors.

People+
Brighter Living Solutions are products and services that, when considered over their whole life cycle, offer a clear environmental benefit (ECO+) and/or a social benefit (People+). People+ solutions are products and services that, when considered over their whole life cycle, offer a clear social benefit compared to the mainstream reference solutions. The social benefit can occur at any stage of the product life cycle. People+ solutions, in short, create more value with a better social impact. The qualification People+ is based upon the DSM People Life Cycle Assessment (LCA) method or expert opinion. For the definition of mainstream competing/reference solutions, please see the company website.

People Life Cycle Assessment (People LCA)
The People LCA identifies the social impacts of products over its life cycle on the dimensions of health, comfort and well-being, working conditions and community development. The methodology has been developed by DSM based on international standards, extensive road testing and external stakeholder dialogues. DSM takes an active approach to further harmonize and standardize this metrics in the Roundtable for Product Social Metrics and World Business Council for Sustainable Development (WBCSD).

REC-rate DSM all
The REC-rate DSM all is the number of recordable injuries per 100 DSM employees and contractor employees in the past 12 months: REC-rate = 100 * (number of RECs (past 12 months) / average effective manpower including contractor employees (past 12 months)).

Safety, Health and Environment (SHE)
DSM’s policy is to maintain business activities and produce products that do not adversely affect safety or health, and that fit with the concept of sustainable development. The company does this by setting the following objectives: to provide an injury-free and incident-free workplace; to prevent all work-related disabilities or health problems; to control and minimize the risks associated with DSM's products for their whole life cycle and to choose production processes and products such that the use of raw materials and energy is minimized; to evaluate and improve DSM's practices, processes and products continuously in order to make them safe and acceptable to its employees, the customers, the public and the environment.

United Nations Global Compact
A strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment and anti-corruption.

United Nations’ Universal Declaration of Human Rights
On 10 December 1948, the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights. Following this historic act, the Assembly called upon all Member countries to publicize the text of the Declaration and 'to cause it to be disseminated, displayed, read and expounded principally in schools and other educational institutions, without distinction based on the political status of countries or territories'.

PLANET

Biofuel
A fuel which is derived from renewable organic resources, as distinct from one which is derived from non-renewable resources such as oil and natural gas.

Carbon footprint

The total set of direct and indirect greenhouse gas emissions expressed as CO_2eq.

Circular economy

Circular economy refers to an economy that is restorative and in which materials flows are of two types: biological nutrients, designed to re-enter the biosphere safely, and technical nutrients, which are designed to circulate at high quality without entering the biosphere throughout their entire lifecycle.

CO_2

Carbon dioxide, a gas that naturally occurs in the atmosphere. It is part of the natural carbon cycle through photosynthesis and respiration. It is also generated as a by-product of combustion. Carbon dioxide is a greenhouse gas.

Chemical Oxygen Demand (COD)

COD is an indicator of the degree of pollution of waste water by organic substances.

ECO+

Brighter Living Solutions are products and services that, when considered over their whole life cycle, offer a clear environmental benefit (ECO+) and/or a social benefit (People+). ECO+ is DSM's program for the development of sustainable, innovative products and solutions with environmental benefits. Products qualify as ECO+ when their environmental impact is lower than competing mainstream solutions that fulfill the same function. The environmental benefits can be created at any stage of the product life cycle, from the raw materials through to manufacturing and potential re-use and end-of-life disposal. ECO+ solutions, in short, create more value with the least environmental impact. The qualification ECO+ is based upon internal expert opinions where various impact categories are evaluated. For a growing number of products these expert opinions are supported by Life Cycle Assessments (LCA). As of 2016, the expert opinion process will be prescribed to harmonize the processes for expert opinion and LCA-based ECO+ solutions. For the definition of mainstream competing/reference solutions, please see the company website.

Environmental Life Cycle Assessment (Eco LCA)

The Environmental Life Cycle Assessment (Eco LCA) identifies the material, energy and waste flows associated with a product or process over its entire life cycle to determine environmental impacts and potential improvements; this full life cycle approach is also referred to as 'Cradle to Grave'. It is also possible to assess a partial life cycle of a product or process with the most common type being 'Cradle to Gate' which assesses the environmental impacts of a manufacturing process without accounting for use phase or end of life impacts. There are many different environmental impact categories that can be assessed using LCA; at DSM the standard approach is to evaluate the carbon footprint and eco-footprint, published by the WBCSD Chemical Sector in 2014.

Eco-efficiency

Eco-efficiency is a concept (created in 1992 by WBCSD) that refers to the creation of more goods and services while using less resources and creating less waste and pollution throughout their entire life cycle. DSM applies the concept to its ECO+ program. In the context of DSM's SHE targets, eco-efficiency relates specifically to the reduction of emissions and energy and water consumption, relative to the production volumes of DSM's plants.

Greenhouse-gas emissions (GHGE) reduction over volume-related revenue (VRR)

The GHGE definition is according to the Kyoto Protocol and includes carbon dioxide (CO_2), methane, nitrous oxide (N_2O), sulfur hexafluoride, hydrofluorocarbons and perfluorocarbons. VRR is net sales adjusted for changes in selling prices, exchange rates and the impact of acquisitions and divestments. GHGE/VRR is one of the ratios in the Long-Term Incentive part of the Managing Board remuneration and relates to a three-year period.

Greenhouse-gas emissions (GHGE) efficiency improvement

The GHGE efficiency improvement is the amount of GHG emissions per unit of output (specific emissions) in a given year compared to the specific emissions in the prior year. GHG efficiency improvements are one of the ratios in the Long-Term Incentive part of the Managing Board remuneration and relate to a three-year period.

GRI

The Global Reporting Initiative (GRI) has developed Sustainability Reporting Guidelines that strive to increase the transparency and accountability of economic, environmental, and social performance. The GRI was established in 1997 in partnership with the United Nations' Environment Programme. It is an international, multi-stakeholder and independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. These Guidelines are for voluntary use by organizations for reporting on the economic, environmental, and social dimensions of their activities, products, and services.

Loss of Primary Containment (LOPC)

Loss of Primary Containment is an unplanned or uncontrolled release of material from the container that is in direct contact with the material.

N

Nitrogen. A mostly inert gas constituting 78% of the earth's atmosphere, nitrogen is present in all living organisms.

N_2O

Nitrous oxide. A gas that is formed during combustion. When emitted to the environment, it contributes to global warming.

NO_x
Nitrogen oxides. These gases are released mainly during combustion and cause acidification.

Renewable resource
A natural resource which is replenished by natural processes at a rate comparable to, or faster than, its rate of consumption by humans or other users. The term covers perpetual resources such as solar radiation, tides, winds and hydroelectricity as well as fuels derived from organic matter (bio-based fuels).

SO_2
Sulfur dioxide. This gas is formed during the combustion of fossil fuels and causes acidification.

VOC
Volatile organic compounds. The term covers a wide range of chemical compounds, such as organic solvents, some of which can be harmful.

Water use and water consumption
Water use includes water used for 'once-through cooling' that is returned to the original water source after use. Water consumption is the portion of water used that is not returned to the original water source after being withdrawn.

PROFIT

General
In calculating financial profitability ratios, use is made of the average of the opening and closing values of balance sheet items in the year under review.

The financial indicators per ordinary share are calculated on the basis of the average number of ordinary shares outstanding (average daily number). In calculating Shareholders' equity per ordinary share, however, the number of shares outstanding at year-end is used.

In calculating the figures per ordinary share and the 'net profit as a percentage of average Shareholders' equity available to holders of ordinary shares', the amounts available to the holders of cumulative preference shares are deducted from the profits and from Shareholders' equity.

Capital employed
The total of the carrying amount of intangible assets and property, plant and equipment, inventories, trade receivables and other receivables, less trade payables and other current liabilities.

Capital expenditure
This includes all investments in intangible assets and property, plant and equipment as well as the acquisition of subsidiaries and associates and related cash flows.

Disposals
This includes the disposal of intangible assets and property, plant and equipment as well as the disposal of participating interests and other securities.

Earnings before interest, tax, depreciation and amortization (EBITDA)
EBITDA is the sum total of operating profit plus depreciation and amortization. Adjusted EBITDA is the EBITDA adjusted for material items of profit or loss coming from acquisitions/ divestments, restructuring and other circumstances that management deem it necessary to adjust in order to provide clear-reporting on the underlying developments of the business.

Earnings per ordinary share
Net profit attributable to equity holders of Koninklijke DSM N.V. minus dividend on cumulative preference shares, divided by the average number of ordinary shares outstanding.

Innovation sales
Innovation sales are defined as products and applications that have been introduced over the last five years.

Operating working capital
The total of inventories and trade receivables, less trade payables.

Organic sales growth
Organic sales growth is the total impact of volume and price/mix. Impact of acquisitions and divestments as well as currency impact are excluded.

Return on capital employed (ROCE)
Adjusted operating profit as a percentage of weighted average capital employed.

Total shareholder return (TSR)
Total shareholder return is capital gain plus dividend paid.

Working capital
The total of inventories and current receivables, less current payables.

List of abbreviations

ABS	Acrylonitrile Butadiene Styrene
ADR	American Depositary Receipts
AFM	Netherlands Authority for the Financial Markets
API	Active Pharmaceutical Ingredients
ARA	Arachidonic acid
BIO	Biotechnology Industry Organization
BRA	Business Risk Assessment
CDP	The new name for the Carbon Disclosure Project
CEFIC	Conseil Européen des Fédérations de l'Industrie Chimique (European Chemical Industry Council)
CGU	Cash Generating Unit
COA	Corporate Operational Audit department
CoBC	Code of Business Conduct
COD	Chemical Oxygen Demand
CPLC	Carbon Pricing Leadership Coalition
CRA	Corporate Risk Assessment
CRP	Corporate Research Programme
CSD	Corporate Strategy Dialogue
CSR	Corporate Social Responsibility
DHA	Docosahexaenoic acid
DNCC	DSM Nanjing Chemical Co., Ltd.
DNP	DSM Nutritional Products
DSGC	Dutch Sustainable Growth Coalition
DSP	DSM Sinochem Pharmaceuticals
EBA	Emerging Business Area
EBIT	Earnings before interest and taxes (Operating Profit)
EBITDA	Earnings before interest, taxes, depreciation and amortization
EEI	Energy Efficiency Improvement
EPA	Eicosapentaenoic Acid
FIFO	First in, first out
FTE	Full-time equivalent
GDP	Gross Domestic Product
GHG	Greenhouse-gas
GHGE	Greenhouse-gas emissions
GHS	Globally Harmonized System
GMM	Genetically Modified Micro-organisms
GRI	Global Reporting Initiative
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRIC	International Financial Reporting Interpretation Committee
IFRS	International Financial Reporting Standards
ILO	International Labour Organization
IP	Intellectual Property
IPO	Initial Public Offering
LCA	Life Cycle Assessment
LoR	Letter of Representation
LTI	Long-Term Incentive
LWC	Lost Workday Case
NGO	Non-Governmental Organization
NPS	Net Promoter Score
OECD	Organisation for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
PA	Polyamide
PBT	Polybutylene Terephthalate
PDN	Stichting Pensioenfonds DSM Nederland
PE	Polyethylene
PEA	Polyesteramide
PET	Polyethylene Terephthalate
PPA	Purchase Price Allocation
PPS	Polyphenylene Sulfide
PRA	Process Risk Assessment
PSI	Process Safety Incident
R&D	Research & Development
REACH	Registration, Evaluation, Authorization and Restriction of Chemical substances
RFQ	Request For Quote
ROCE	Return on Capital Employed
SAM	Sustainable Asset Management
SAR	Share Appreciation Rights
SDG	Sustainable Development Goal
SHE	Safety, Health and Environment
SSP	Supplier Sustainability Program
STI	Short-Term Incentive
SUN	Scaling Up Nutrition Movement
SVHC	Substances of Very High Concern
TDC	Total Direct Compensation
TSR	Total Shareholder Return
UN	United Nations
UNGC	United Nations Global Compact
VOC	Volatile Organic Compound
VRR	Volume-Related Revenue
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum
WFP	United Nations World Food Programme

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