



Royal DSM Integrated Annual Report 2017

HEALTH • NUTRITION • MATERIALS



DSM

BRIGHT SCIENCE. BRIGHTER LIVING.

DSM at a glance

Nutrition

DSM Nutritional Products and DSM Food Specialties form our Nutrition business. DSM Nutritional Products provides solutions for animal feed, food and beverages, pharmaceuticals, infant nutrition, dietary supplements and personal care. DSM Food Specialties is a leading global supplier of specialty food enzymes, cultures, bio-preservation, hydrocolloids, savory, and sugar reduction solutions.

Materials

DSM's Materials business includes DSM Engineering Plastics, DSM Dyneema, and DSM Resins & Functional Materials. DSM is a global player in specialty plastics for the electrical components and electronics, automotive, flexible food packaging and consumer goods industries. The materials portfolio also includes Dyneema®, the world's strongest fiber™, as well as resins for paints, industrial applications and optical fiber coatings.

Innovation Center

DSM Innovation Center accelerates the innovation power and speed of our core businesses. It also has a business development role, focusing on areas outside the current scope of the business groups. The company has three Emerging Business Areas: DSM Biomedical, DSM Bio-based Products & Services and DSM Advanced Solar.

Partnerships

As part of DSM's strategic transformation and move away from more commoditized and cyclical areas, we established joint ventures: DSM Sinochem Pharmaceuticals, Patheon and Chemicalinvest. In 2017, DSM divested Patheon for proceeds of about € 1.5 billion.



People

21,054

Workforce
(at year-end 2017,
excluding affiliates)

75%

Employee engagement
index, up 4% from
2016

27/73

Female/male ratio
stable versus 2016¹

17%

Female executives,
up 2% from 2016

0.36

Frequency Index of
Recordable Injuries up
from 0.33 in 2016²

¹ The companies that are not integrated into the HR systems (approx. 10% of the total workforce) are not taken into account.

² Per 100 DSM employees and contractor employees.

Planet

26%

Greenhouse-gas efficiency
improvement, cumulative
versus 2008 (on track)

21%

Purchased electricity
from renewable sources,
up from 8% in 2016

21%

Innovation sales as %
of total sales. Target of
~20% achieved.

3%

Energy efficiency
improvement, cumulative
versus 2015. Ambition of
more than 10% in 2025.

23

Water consumption, up from
22 in 2016 (in million m³)

Brighter Living Solutions

62%

Sales of Brighter Living Solutions
(ECO+ / People+), aiming for 65%
by 2020

**Climate
and energy**
More than 200
million solar
panels contain
our solutions.

90% of cars
sold today
contain our
materials.

Profit

€ 8,632

Net sales (in millions)
up 9% from € 7,920

€ 1,445

Adjusted EBITDA¹
(in millions) versus
€ 1,262 in 2016

15%

Adjusted EBITDA growth
versus 2016

+190

ROCE growth (in bps)
versus 2016

12.3%

ROCE versus 10.4%
in 2016

€ 996

Cash provided by operating
activities (in millions) versus
€ 1,018 in 2016

€ 546

Capital expenditure
(cash-based), up from
€ 475 in 2016 (in millions)

€ 1,781

Net profit (in millions),
up from € 629 in 2016

€ 10.07

Net earnings per ordinary
share, versus € 3.52
in 2016

€ 1.85

Proposed dividend per
ordinary share² for 2017,
up from € 1.75 in 2016

¹ See page 167 for reconciliation.

² Subject to approval by the Annual General Meeting of Shareholders.



Circular and bio-based economy

From bio-based resins to fully recyclable carpets, DSM is finding solutions.

Our materials are in virtually every mobile device on the market.

Nutrition

As the #1 supplier of vitamins, and with a broad portfolio of food ingredients, we support good health at every age.

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 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 24.

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 data¹

	2017 ²	2016 ²
People		
Workforce at 31 December (headcount)	21,054	20,786
Female/male ratio ³	27/73	27/73
Total employee benefits costs (in € million)	1,768	1,752
Frequency Index of Recordable Injuries (per 100 DSM employees and contractor employees)	0.36	0.33
Employee engagement — favorable score (in %)	75	71
Planet		
Energy use (in petajoules)	23.6	22.6
Energy Efficiency Improvement (in %, baseline 2015)	3	2
Greenhouse-gas emissions, market-based (in CO ₂ equivalents x million tons)	1.5	1.4
Greenhouse-gas efficiency improvement (in %, baseline 2008)	26	23
Water consumption (x million m ³)	23	22
Brighter Living Solutions (as % of net sales)	62	63
Profit (in € million)		
Net sales	8,632	7,920
Adjusted EBITDA, continuing operations ⁴	1,445	1,262
EBITDA, continuing operations	1,348	1,174
Adjusted operating profit, continuing operations (EBIT) ⁴	957	791
Operating profit, continuing operations (EBIT)	846	685
Net profit	1,781	629
Cash provided by operating activities	996	1,018
Capital expenditure, cash based	546	475
Dividend for DSM shareholders (based on profit appropriation) ⁵	331	310
Net debt	742	2,070
Shareholders' equity	6,962	6,072
Total assets	12,802	12,958
Capital employed	7,766	7,889
Market capitalization at 31 December ⁶	14,454	10,334
Per ordinary share in €		
Net earnings	10.07	3.52
Dividend	1.85 ⁵	1.75
Financial ratios (%)		
Sales to high growth economies / net sales	44	44
Innovation sales / net sales	21	22
Adjusted EBITDA margin ⁴	16.7	15.9
Average working capital / annualized net sales	18.4	18.6
ROCE	12.3	10.4
Gearing (net debt / equity plus net debt)	9.5	25.1
Equity / total assets	55.2	47.5
Cash provided by operating activities / Adjusted EBITDA ⁴	68.9	80.7

¹ For definitions see 'Explanation of some concepts and ratios' on page 240.

² Key data presented relate to total DSM (= continuing operations + discontinued operations), unless explicitly stated otherwise.

³ For the indexes based on age, nationalities, gender, inflow and outflow, the companies that are not integrated into the HR systems (approx. 10% of the total workforce) are not taken into account.

⁴ 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, and referred to as 'Adjusted'. 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 165.

⁵ Subject to approval by the Annual General Meeting of Shareholders.

⁶ Source: Bloomberg.

Letter from the CEO

Dear reader,

In almost all aspects 2017 has been a very rewarding year for our company.

Strategy and purpose

We are well ahead with the implementation of our three-year strategy we set in 2015 for the period till end 2018. This strategy, '*Driving Profitable Growth*', followed the significant transformation of DSM and adjustments to our portfolio of business activities in the period 2005/2010 to 2015. In 2015, we deliberately entered a next phase in which we decided to hold further portfolio transformation and larger acquisitions and/or divestments and to focus strongly on (organic) growth, operational and financial performance, demonstrating the full potential of our promising future-oriented portfolio previously developed.

We are very pleased that in terms of growth and financial performance we already achieved the targets set for 2018 in 2017 and completed the divestment of our non-core participation in Patheon ahead of schedule and at an attractive value. We also plan to monetize the two remaining non-core participations (DSM Sinochem Pharmaceuticals and ChemicalInvest).

With an integral stakeholder approach including our customers, our employees, our shareholders, and society at large, we have built strong businesses. Our growth platforms are addressing the main important societal trends and have especially a strong alignment with five of the 17 United Nations Sustainable Development Goals (SDGs also referred to as *global goals*), which set out the strategy for the world. In this way, we ensure that the growth and success of DSM benefits all stakeholders.

It is rewarding to see that the portfolio we created over the years has so much growth potential. To ensure this continues, we further focused our innovation program on a smaller number of bigger projects (such as Clean Cow, Green Ocean, Niaga®, Solar), providing interesting opportunities from 2019/20 and onwards. In this Integrated Annual Report, you will find information about these and other innovation projects.

Our focus on aligning our strategy and innovation programs with global societal trends is increasingly recognized. In 2017 *Fortune*, the world-renowned business magazine, named DSM among the top three companies that are "Changing the World". This was both encouraging and humbling for our company. Founded as a Dutch coal mining company more than 115 years ago, transformed into a (bulk) chemical company and then once more into a science-based global leader in health, nutrition, and materials, we are now recognized as an important contributor to improving the world. This is important to all our employees worldwide, who are

proudly engaged and fiercely passionate about making the planet a better place for all and this is appreciated by our thousands of customers who appreciate the value we provide via sustainable solutions. Additionally, we are grateful to our dozens of partners across the public and private sector, together with whom we can make this happen.

At the heart of this lies our purpose and core value, sustainability. Together with many stakeholders, especially with our customers, DSM creates brighter lives for people today and generations to come. We are working hard to make a real difference in health & nutrition, climate & energy, and the circular and bio-based economy. We understand the inter-related nature of these three domains, and this is where our business portfolio and competences align particularly well with our sustainability focus. Not only does our science and innovation deliver value for society, it delivers value for our customers and our shareholders at the same time. That is why we are proud of our Triple P approach — creating value on three dimensions simultaneously: People, Planet and Profit. We see that this approach has also led to increased employee motivation, engagement, and pride, as well as a better position in the labor market.

Delivery and growth

Our performance in 2017 yet again exceeded expectations. As in 2016, we over delivered on our two main financial targets, achieving 15% annual Adjusted EBITDA growth — versus a high single-digit percentage target — and achieving a 190 basis point improvement in Return On Capital Employed (ROCE) — versus a high double-digit basis point target. Our total sales increased by 9% to €8.6 billion, mainly through an organic growth of 9%, ahead of plan and outpacing market growth in all our businesses.

We achieved an Adjusted EBITDA of €1,445 million (versus €1,262 million in 2016) and a total net profit of €1,781 million, the latter enhanced by the divestment of Patheon, which created a gain on disposal of €1,250 million in 2017 and over €2 billion in total proceeds over the years (€1.5 billion in 2017).

Both our Nutrition and Materials businesses contributed to this successful step-up in financial performance, and the new operating model that was introduced in 2015, enabled cost and profit improvements that supported our results, achieving total savings with a run rate of about €195 million at the end of 2017 compared to the 2014 baseline.

As a global company, we are well-represented in all major growth areas in the world: 44% of our total sales are from emerging economies, in line with our stated balanced ambition. At the same time, we continue to build our innovation pipeline with specific projects that resulted in 21% of our sales coming from (recent) innovations, above our target of 20%.

We feature many examples of growth, delivery and innovation areas throughout this report, as well as more information on the full financial performance in 'Profit' on page 52.

Sustainability and business

Sustainability is fully integrated in our strategy, business and operations, and we ensure that our solutions are better for people and/or planet. In 2017, 62% of our current sales came from products which have a better environmental (ECO+) and/or social (People+) impact compared to mainstream solutions – our Brighter Living Solutions (see 'Planet' on page 46 and 'Review of business' on page 68 of this Report). Our target is 65% of sales by 2020. Meanwhile, our innovation pipeline is very strong, with over 80% classified as Brighter Living Solutions and therefore we remain firmly on track. The growth and margins of these products are above average, confirming that the market embraces these sustainable solutions, proof that societal gain and business gain can go hand in hand.

At the same time, we've succeeded in taking a more sustainable approach to our own operations. For example, we use an internal carbon price of €50 per ton of CO₂ to help guide our investments and operational decisions, and we are making progress toward our target of 50% purchased electricity from renewable sources by 2025. In 2017, we reached already 21% by among others several agreements with wind parks in Europe and in the US and the installation of solar panels at our sites are supporting this progress.

Not only do we *reduce* our own environmental footprint and *enable* our customers to do the same with our innovative solutions, we also *advocate* on the issues that define our times. DSM continues to be a positive voice, shaping discussions with organizations like the CEO Climate Ambassadors of the World Economic Forum, the Carbon Pricing Leadership Coalition (CPLC, convened by the World Bank, supported by the UN, IMF and OECD) and We Mean Business.

Beyond climate and energy, DSM also contributes to the circular and bio-based economy. Prime examples are improvements to solar energy yields via our proprietary solar panel coatings, our bio-based solutions and fuels and the circular, fully recyclable carpets based on DSM-Niaga technology.

Improved nutrition is another focus area for DSM. We work hard to help reduce levels of sugar, salt and fat in food and make it healthier. In 2017, we also took another step in providing access to nutritious food for malnourished mothers and children while stimulating the local economy in Africa. After ten years of our successful partnership with the UN World Food Programme, supporting over 30 million people worldwide with essential nutrients, we expanded our approach with our Africa Improved Foods (AIF) project, which

opened its first factory in Rwanda. The factory sources corn and soy from almost 10,000 mostly female smallholders and produces locally nutritious, healthy food for the local market. The Government of Rwanda has entered into a joint venture with AIF to improve the nutritional status of its population and make Rwanda (and other African countries later on) more self-supporting. We work on expanding this model further in the region together with, among others, the United Nations Scaling Up Nutrition (SUN) movement and other partners.

Many of the above-mentioned achievements are being recognized externally as well, resulting in leading positions in, among others, CDP, the non-profit global environmental disclosure platform, the Dow Jones Sustainability Index (DJSI) and Sustainalytics.

Science and innovation

At DSM, we believe science can change the world. In fact, we are the living proof. As a science-based company, one of the pillars supporting our success is our ability to develop new, more sustainable solutions. As well as our own innovations, we salute scientists, the unsung heroes who work tirelessly, often anonymously, on breakthroughs that make life better for billions of people. This year, DSM and partners invited researchers, changemakers and innovators from all over the world to take center stage in our Bright Minds Challenge, a competition for projects that can help mitigate climate change by accelerating the transition to 100% renewable energy. Professor Ernesto Calvo from Argentina accepted the grand prize during the final in Amsterdam. Recognizing that lithium-ion batteries are critical for renewable energy storage, he led a team of researchers who designed a quicker, cleaner lithium extraction technique that is powered by the sun. Now, with DSM's support, his team is scaling up their efforts in Latin America.

Further evidence of our commitment to science, technology and innovation was the opening of DSM's new state-of-the-art biotechnology center in Delft (Netherlands). Building on a solid history of fermentation and biotechnology innovation in the region, our scientists in Delft create solutions for societal challenges including the need to provide all people with healthy, nutritious food. Early in 2017, we opened a new state of the art Materials Science Center in Sittard-Geleen (Netherlands).

Our people and leadership

All this happens because of the brain power, will power and passion of our employees, who say with pride that working at DSM is about *Doing Something Meaningful*. Our people feel more inspired and committed than ever. The results of our annual employee engagement index jumped from 71% to an exciting level of 75% in 2017, despite the significant

operational transformation and focus on operational efficiency across the company these past two years.

To support our growth ambitions, we trained all our executives in our Lead & Grow program on how to navigate this Volatile, Uncertain, Complex and Ambiguous (VUCA) world, on how to deal with dilemmas and find creative solutions to everyday problems, while working even more closely together with our customers.

We also continued to focus on improving on inclusion and diversity. Today, more nationalities are represented across DSM and there is a better gender balance in management and executive positions.

At leadership level, the composition of our Supervisory Board also reflects our desire to be more gender balanced, international, inclusive and diverse. Special thanks to the Supervisory Board for their support in 2017, their advice and challenges, supporting us to set the correct path to deliver on our strategic, financial and societal promises. We thank Pierre Hochuli very much for his great contribution over so many years and we welcome our new members, Frits van Paasschen and John Ramsay.

Last year, we also had to say a final farewell to our friend and former colleague, Peter Elverding. Peter devoted more than 20 years of his illustrious career to DSM, and led our company as CEO and Chairman of the Managing Board from 1999 to 2007. His vision, leadership, warmth, and humility, as well as appreciation of the importance of a long-term view were instrumental in the transformation DSM underwent in those years, thus preparing the ground for DSM to become the company it is today.

We worked on further improving our safety performance in 2017 and thousands of people dedicated their time and talent to make DSM a safer place to work, every single day. However, it has not yet always been as successful as we want it to be. We report with deep sadness, that in September one of our contractors, Steven Gonsalves lost his life in a tragic incident at our site in Augusta (Georgia, USA). Two other workers were also injured. We very much realize we can never let our attention slip and must further improve safety at DSM. Even though there are fewer incidents today than there were 10 years ago, there is no question — we need to give even more attention to our own safety and that of our colleagues, and we will. For more on this, please see 'What still went wrong in 2017' on page 132.

Looking to the future

As we look to 2018 and beyond, one thing that's certain is change. Just as Darwin taught us, adaption is a prerequisite for success. We have to shape our own destiny by future-proofing our company and businesses. We must continue to

improve the performance and sustainability of our company and help others do the same as nobody can be successful or even claim to be successful in a world that fails. Our next step will be to update our strategy so that we can continue to create brighter lives for people today and generations to come. And not just for a privileged few, but for all. In the meantime, thank you to everyone who contributed to a great year. I am thankful for the loyalty of our customers, the trust of our shareholders and the passion of our people. I also thank my colleagues of the Executive Committee and we all look forward to building on this momentum in 2018.

Feike Sijbesma
CEO/Chairman Managing Board Royal DSM



DSM and the Sustainable Development Goals

“The United Nations Sustainable Development Goals set out the global strategy for the world in order to tackle some of the most challenging issues. At DSM we proudly take a leading role in advancing the SDGs as part of our business strategy.”

Feike Sijbesma, CEO/Chairman Managing Board

Throughout this report, we describe our contributions to each of the 17 Sustainable Development Goals or SDGs. We highlight how our health, nutrition and materials solutions are aligned with specific goals and how our activities with customers, partners and other stakeholders contribute in a positive way.

All 17 goals are important. While we engage on every single one, we especially address five SDGs across our three growth areas: nutrition, climate and energy, and circular and bio-based economy.

Nutrition

- [SDG 2: Zero hunger](#)
- [SDG 3: Good health and well-being](#)

Today millions of people go hungry, nearly two billion are malnourished and yet billions more are overweight or obese. At DSM, we are helping people get the nutritious food they need to live healthier lives. At the same time, we recognize that food production has an impact on the environment so we develop solutions that are better for the planet.

Climate and energy

- [SDG 7: Affordable and clean energy](#)
- [SDG 13: Climate action](#)

Human activity is causing climate change. The world must reduce greenhouse-gas emissions and accelerate the transition to a low-carbon economy. At DSM we reduce our own emissions, enable the low-carbon economy through our products and services, and advocate for climate action.

Circular and bio-based economy

- [SDG 12: Responsible consumption and production](#)

The world's resources are limited. Instead of continuing to make waste, people must reuse, repair, repurpose and recover resources. At DSM, we are innovating to support a more circular, bio-based economy.

The final goal, SDG 17: Partnerships for the Goals, is equally important to us. DSM works together with partners across the public and private sectors. Our partners include UN agencies like the World Food Programme (WFP) and UNICEF. We also work with the World Business Council for Sustainable Development, non-governmental organizations and other companies.

To learn more about DSM and the SDGs, keep reading and look for the colorful icons throughout this Report. For more about our partnerships see 'Stakeholders' on page 26.



Through our partnerships, we contribute to agricultural learning and economic development in developing countries. ●●



Our initiatives in the Nutrition Improvement Program, Africa Improved Foods and many of our partnerships lead our approach in improving nutrition. ●●●



Our product offerings in Nutrition, Materials and Biomedical address health issues. The safety and health of our employees and contractors is a high priority. ●●●



We provide learning and development opportunities to our employees. Through WFP, we contribute to agricultural learning. ●



We aspire to increase female representation in the management of DSM. We collaborate with partners to foster female participation. ●●



Water is managed using a local, risk-based approach with mitigating actions as required. ●



Our product portfolio includes materials for biofuels and renewable energy production. We are increasing the use of renewable energy within the company. ●●●



Africa Improved Foods demonstrates our role in developing countries. We contribute to the economic growth of the countries in which we operate. ●●



Innovation is essential to DSM's business success and our impact on society. Our R&D has a global footprint. ●●



Our Inclusion & Diversity policy addresses inequalities in our value chain. We foster inclusive employment in local communities through local programs. ●●



We support philanthropic initiatives that contribute to local communities. ●



We collaborate with external partners on sustainable sourcing. Our portfolio offers products using bio-based feedstocks, addressing food waste and demonstrating circular concepts. ●●●



We collaborate with like-minded organizations on climate action and carbon pricing. We address impact on climate in our own operations and our product offerings. ●●●



Our products contribute to aquaculture through netting and animal feeds. Our partnership with The Ocean Cleanup helps to address marine waste. ●●



We monitor areas of high biodiversity near our sites. We see sustainable biomass as an alternative raw material to petrochemicals. ●



Our Code of Business Conduct is core to our approach to ethical business and good corporate governance. ●




We partner with like-minded organizations to amplify our contributions to all the goals. These partnerships are described throughout this Report. ●●●

DSM's engagement: ● = Minor ●● = Moderate ●●● = Major





 **@NootriAfrica**
Happy #NationalSelfieDay
#NootriMama
Kigali, Rwanda

Good nutrition is a human right. That's why DSM is working together with stakeholders like the Government of Rwanda in a partnership called Africa Improved Foods (AIF). In 2017, AIF opened a factory that sources maize and soy from local smallholder farmers and makes fortified porridge. Selling under the brands NootriMama™ and NootriToto™, the porridge will help people – especially mothers and children – get the nutrients they need. It also creates steady income for thousands of people, including many women, in the region.





@TheOceanCleanup

This is the stomach content of a single sea turtle found last year. Microplastics will increase dozens of times unless we clean it up.

Oceans are critical for sustaining life. They regulate the climate and oxygen in our atmosphere, and are a source of food. DSM is a proud partner of The Ocean Cleanup, a non-profit organization developing advanced technologies to rid the world's oceans of floating plastic. In 2017, The Ocean Cleanup performed off-shore prototype tests to prepare for the launch of a first full-scale cleaning system from the US west coast in 2018. DSM supplies Dyneema®, the world's strongest fiber™ — used in multiple applications of this ambitious program.







CHILE

SOUTH AFRICA

CHILE

CANADA

PORTUGAL

ASP

WBG





 **@Davos**
 How can we strengthen public-private cooperation to accelerate development? #wefimpact

Partnerships are a way of working at DSM. Perhaps nowhere is this more apparent than at the World Economic Forum (WEF) where DSM CEO Feike Sijbesma advocates for partnerships to achieve the SDGs. In 2017, he and other DSM executives met with world leaders, signed agreements and spoke on key issues at WEF events around the world. In addition, through his role as Co-Chair of the High Level Assembly of the Carbon Pricing Leadership Coalition convened by the World Bank, he urges business and government to support carbon pricing.



Strategy 2018

Driving profitable growth

Demonstrating the full potential of our promising future-oriented portfolio, which we have developed.

Our strategy addresses what we see happening in the world – issues around health and wellness, climate and energy, circular and bio-based economy, and global shifts and digital transformation.

All SDGs are important but we especially address the following:

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



7 AFFORDABLE AND CLEAN ENERGY



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



We consider People, Planet, Profit in all that we do

75%

Positive employee engagement index **+4% up from 2016**

62%

Sales of Brighter Living Solutions (ECO+ / People+), working toward 65% by 2020

€ 1,445

Adjusted EBITDA actual 2017 (in millions) **+15% up from 2016**

12.3%

ROCE actual 2017 **+ 190 bps up from 2016**

+9%

Organic sales growth up from 2016

At DSM our mission is to create brighter lives for people today and generations to come. To do this in a sustainable way, we have to consider what we call the Triple P — People, Planet and Profit — in all that we do. This approach is clearly defined in the way DSM creates value for all of our stakeholders and it forms the basis of our strategy reviews.

DSM has been transformed into a truly global company that provides innovative, sustainable solutions in health, nutrition and materials. After a period of significant portfolio changes, in late 2015 DSM launched Strategy 2018: *Driving Profitable Growth* focused on capturing the full potential of the business portfolio that has been created and translating this into improved financial results. In the period 2016-2018, our aim is 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.

A strategy designed around megatrends

People, economies and markets worldwide are being impacted 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 as people become older, more urbanized, wealthier and more connected — are exerting increased pressure on resources and the food chain. In addition, they are leading to new patterns of consumption and impacting the environment. Moreover, there is increased attention on health and well-being. These trends present clear challenges, but also offer opportunities to profitably grow our 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

Demographic shifts and technology are driving change worldwide. The population is growing, people are living longer and living standards are increasing. Global populations are generally older, wealthier, increasingly living in urban areas and increasingly connected through technology and global supply chains. At the same time, the gap between rich and poor is becoming wider. These trends put pressure on resources and impact the environment. New technology has implications as well. The massive amount of data that people generate, and that is available to companies, academics, governments, and other parties, is changing daily life — and business — in unprecedented ways.

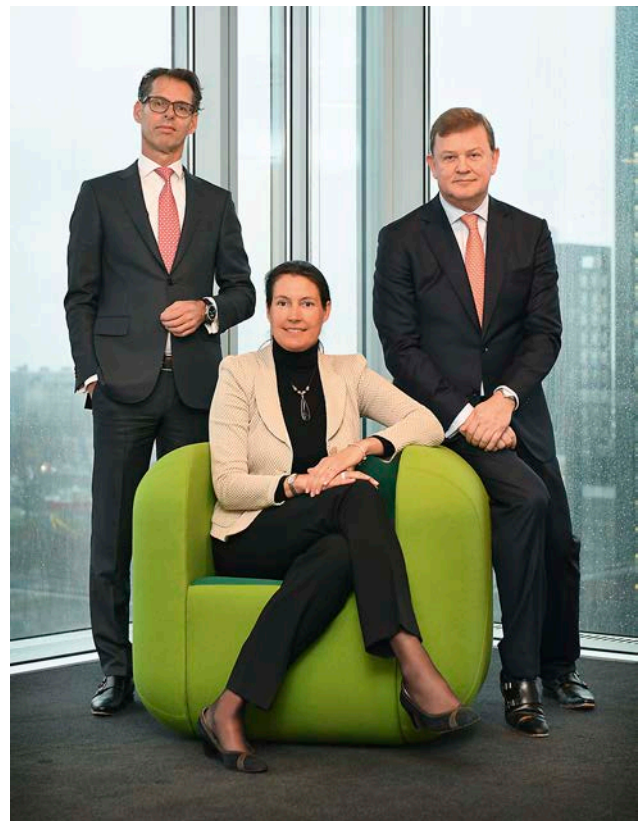
Climate and energy

People around the world are working together to reduce greenhouse-gas emissions and transition to a low-carbon economy. Almost 200 nations signed the Paris Agreement in

2015, acknowledging that climate change is linked to human activity and that stopping it should be an international priority. The United Nations Sustainable Development Goals also help drive climate action and the shift to a more circular and bio-based economy. The circular economy is a system in which products are renewable by design so that people can use them again and again instead of using things once and then throwing them away. The bio-based economy means using renewable resources like the sun, wind and biomass in a sustainable way rather than relying on finite fossil fuels like oil. For DSM, the circular and bio-based economy concepts are mutually reinforcing.

Health and wellness

Billions of people are living longer and more active lives thanks to better medicine, healthcare and nutrition. Still, health and wellness remain concerns, especially as people grow older. Nutrition also presents a challenge. While two billion people suffer from micronutrient and protein deficiencies, three billion are overweight or obese. Sometimes people suffer from micronutrient deficiencies and obesity at the same time. As a result, many people are not reaching their full potential. From stunted growth to non-communicable diseases like heart disease and type-2 diabetes, there is an opportunity for companies like DSM to support better nutrition, health and wellness, as well as more sustainable food systems.

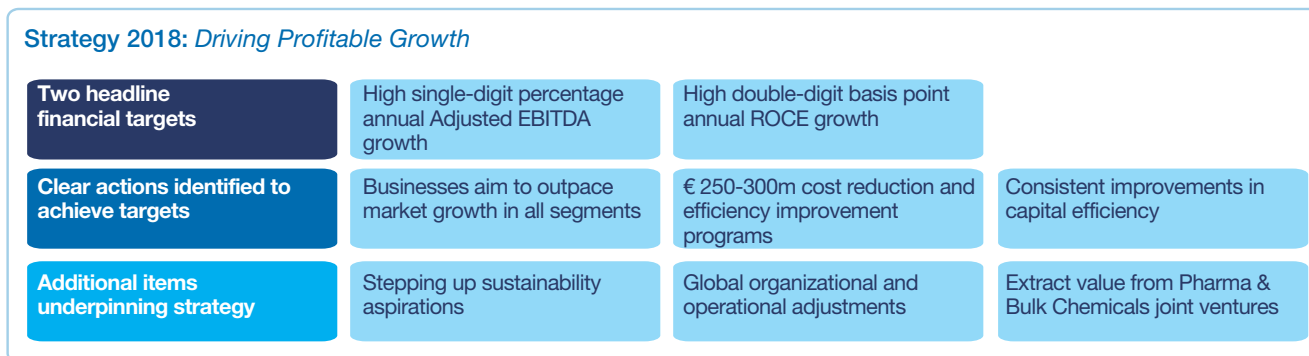


The DSM Managing Board (from left to right): Dimitri de Vreeze, Geraldine Matchett (CFO) and Feike Sijbesma (CEO/Chairman).

With our strategy, we pursue opportunities derived from these megatrends across our entire portfolio and on a global scale. We continue to work together with customers and other partners to create sustainable, science-based solutions that help tackle some of the world's biggest challenges.

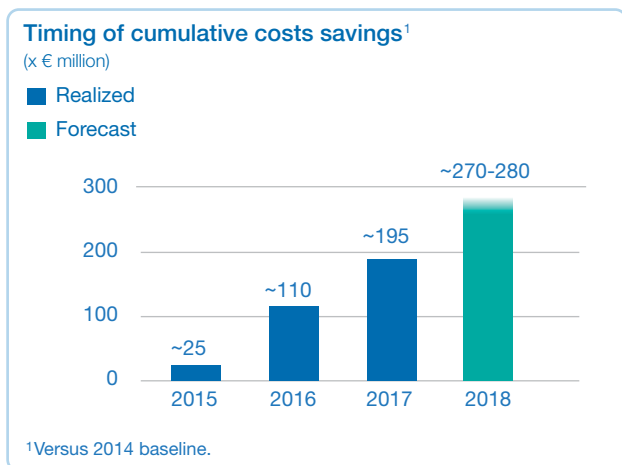
Stepping up DSM's financial performance and sustainability aspirations

Building on these trends, and combined with disciplined focus on performance, we established and implemented our three-year strategic plan for the period 2016-2018 called Strategy 2018: *Driving Profitable Growth* with two headline financial targets: high single-digit percentage annual Adjusted EBITDA growth and high double-digit basis point annual ROCE growth.



To deliver on these targets, we defined clear actions, including outpacing market growth, cost reduction and efficiency improvements, and making a continuous push for consistent improvements in capital efficiency.

We initiated extensive cost-reduction and improvement programs to deliver € 250-300 million in cost savings versus the 2014 baseline. All of these well-identified programs progressed as planned and are on track to deliver the targeted benefits.



In support of our targets, we also adjusted our global organizational and operating model to create a more agile, commercially focused and cost-efficient company. During this strategic period we refrain from large acquisitions and are instead focusing on delivering value from the current portfolio and extracting value from the monetization of our joint venture partnerships.

Another key part of the strategy, besides the financial outcome, is to continue to strengthen our commitment to sustainability by:

- reducing our own environmental footprint;
- enabling other stakeholders, especially our customers, to be more sustainable; and
- advocating on key areas of competence by actively raising awareness and sharing knowledge.

By doing so, we help achieve progress on the Sustainable Development Goals, especially SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Production and Consumption) and SDG 13 (Climate Action). See 'DSM and the Sustainable Development Goals' on page 10 and throughout this Report.

Of course, our people are the ones who have made and continue to make the strategy work. DSM's People Strategy 2018 was at the heart of our success in recent years. We continue to hire and develop thousands of talented people who are encouraged to challenge the status quo and help us grow.

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, macroeconomic 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 101 and 'Risk management' on page 112.

“ Sustainability is what our business is all about. This is what we do. The world is looking for sustainable solutions and that is why we are growing.”

Philip Eykerman, DSM Executive Committee

Progress in 2017

Total DSM financial results

DSM delivered excellent financial results in 2017. Adjusted EBITDA grew by 15% to € 1,445 million, far ahead of the high single-digit growth target we originally set with Strategy 2018. Overall Adjusted EBITDA margin (Adjusted operating profit before depreciation and amortization as a percentage of net sales) was 16.7%, an increase of 80 basis points versus the 15.9% of 2016. In the first two years of Strategy 2018, we have increased our Adjusted EBITDA by € 370 million or 34%.

Return on Capital Employed (ROCE) was also well ahead of target, up 190 basis points to 12.3% in 2017 versus 10.4% in 2016. Since we kicked off our successful Strategy 2018, ROCE is up 470 basis points versus the end of 2015.

DSM reported net sales of € 8,632 million, an increase of 9% versus 2016. Group organic sales growth was 9%, mainly driven by strong 7% volume growth, clearly above market. All businesses, both in Nutrition and Materials, contributed well to this growth. Prices were overall slightly up, partly offset by somewhat weaker currencies.

Financial targets 2016-2018	Realization	
	2017	2016
High single-digit percentage annual adjusted EBITDA growth	15%	17%
High double-digit bps annual ROCE growth	190 bps	280 bps

For all detailed information on DSM's group financial results in 2017, see 'Profit' on page 52.

Nutrition financial results

Our Nutrition business performed very strongly, with 8% organic growth in 2017, clearly outpacing market growth. Volumes were up 7% and prices were up 1%. The successful

implementation of the growth initiatives continued to drive organic growth, both in Animal Nutrition & Health and Human Nutrition & Health.

Animal Nutrition & Health delivered an exceptionally strong 11% organic growth in 2017, of which 9% was volume growth, albeit against an easy comparative base. Our animal nutrition business continued to benefit from the ability to address a wide range of species, as well as from a diversified geographical presence covering all major growth areas. The business also continued to benefit from a strong forward-integrated premix position. Markets in animal feed were favorable and supportive in 2017. Prices were on average slightly above 2016.

Human Nutrition & Health continued to deliver good volume growth, despite ongoing softness in some of its end markets. The 7% organic sales growth in 2017 was driven mainly by 6% higher volumes, outperforming its markets. Food & beverage markets are being addressed successfully through tailored premixes. Sales excellence programs as well as the introduction of new solutions resulted in above-market growth for both multi-vitamins and omega-3 solutions. The i-Health business continued its double-digit growth while early life nutrition remained a strong performer.

Personal Care & Aroma Ingredients as well as Food Specialties continued to perform well in 2017, although growth in Food Specialties was hampered by some capacity constraints in enzymes.

Adjusted EBITDA for Nutrition was € 1,053 million, up 13% driven by the successful execution of our sales growth programs in combination with the impact of the cost-saving and efficiency improvement programs. This increase in Adjusted EBITDA equals the very strong growth in 2016, when Adjusted EBITDA also grew by 13%. Adjusted EBITDA margin further improved in 2017 and was 18.9%, compared with 18.0% in 2016, well within our aspired range of 18-20%. See page 68 for more on the Nutrition cluster's performance.

Materials financial results

Our Materials cluster also had strong financial performance in 2017. Volumes were up 7% and prices were up 6%, fully reflecting higher input costs. Strong growth in specialties was the main driver behind above-market growth. All three businesses in Materials — Engineering Plastics, Resins & Functional Materials and Dyneema — contributed to the 13% organic growth in 2017 by each posting double-digit organic growth.

Total Adjusted EBITDA of our Materials cluster increased by 12% in 2017, driven by strong volume growth in higher-margin specialties. The Adjusted EBITDA margin of Materials was stable at 17.3%, as pricing and group-wide cost-saving and efficiency improvement programs offset higher input costs and

negative currency effects. This robust financial performance demonstrates the improvements achieved in the quality of returns in Materials over the years. For more on the Materials cluster, see page 82.

Innovation results

The DSM Innovation Center has multiple functions within DSM, including accelerating the innovation power of our core businesses and extracting value from our Emerging Business Areas (EBAs). At DSM, we want at least 20% of our sales to come from innovation sales, which we define as sales from products and solutions introduced in the last five years.

In 2017, we made good progress with our focused innovation programs. With 21% innovation sales we continued to deliver on our ambition. The DSM Innovation Center reported €9 million in Adjusted EBITDA in 2017, compared to €1 million in 2016. Our three EBAs — DSM Biomedical, DSM Bio-based Products & Services and DSM Advanced Solar — continued to progress well, delivering €17 million in Adjusted EBITDA in 2017 versus €16 million in 2016. For more information on innovation and R&D, see 'Innovation Center' on page 90.

	2017	2016
Innovation sales	21%	22%
High-growth economies	44%	44%

Balanced global footprint

Sales growth was strong among all regions, with favorable high single-digit growth in Western Europe as well as in North and Latin America. We performed well in Brazil, despite the disruption caused by the meat scandal that impacted the market for beef and poultry exports, and against a backdrop of economic uncertainty. Double-digit sales growth was achieved in China, India as well as in Eastern Europe.

All high-growth economies together currently represent 44% of DSM's sales (45% when Africa is included), in line with 2016. The share of sales in these economies as a proportion of DSM's total sales gives us a well-balanced global geographical spread of our sales.

Sustainability results

Sustainability is our core value. We continue to further embed sustainability across all of our business activities, both in recognition of our responsibility to reduce our environmental footprint and to help our supply chain, customers and partners do the same. We especially focus on the areas of nutrition, climate and energy, and the circular and bio-based economy. In 2017, our Brighter Living Solutions were 62% of total sales, on track towards our ambitious aspiration of 65%.

We are increasingly recognized for our leadership in this area. In 2017, the Dow Jones Sustainability World Index named DSM among the leaders in its industry for the fourteenth consecutive year. This ranking means we will continue to have RobecoSAM Gold Class status in 2018. DSM was one of only 28 companies globally to score an A-rating for both climate and water by CDP, the non-profit global environmental disclosure platform, which is strong recognition for the way we manage environmental risks, reduce emissions and enhance water stewardship. We were also assessed as an ESG (Environmental, Social and Governance) leader within the chemicals industry by Sustainalytics, ranking number one out of 130 companies.

Sustainability aspirations 2020	Realization 2017
Dow Jones Sustainability World Index	
Top ranking (RobecoSAM Gold Class)	Gold class
Brighter Living Solutions	
65% ECO+/People+ (running business)	62%
GHG Efficiency Improvement	
40-45% (2008-2025)	26%
Energy efficiency improvement	
>10% (2015-2020)	3%
Purchased electricity from renewables	
50% by 2025	21%
Employee Engagement Index	
Toward 75% favorable	75%
Safety	
0.25 Frequency Index of Recordable Injuries	0.36
Diversity	
25% Female executives	17%
60% Executives from under-represented nationalities	56%

To read more about our environmental performance, see 'Planet' on page 46. More information on our Brighter Living Solutions is available throughout this Report, particularly in 'Review of business' starting on page 68.

Organization and culture

We are well on track with the adjustments to our global organizational and operating model to support DSM's growth. To achieve our strategy, we set targets around employee safety, engagement and diversity.

Employee engagement jumped from 71% to 75% according to the Employee Engagement Index, which indicates how our employees feel in terms of commitment, pride, advocacy and satisfaction. With this boost we have already met our mid-term goal of 75% engagement, which we had aimed to reach by 2020.

DSM has also made progress on inclusion and diversity, areas that will remain a focus in the years to come. In 2017, the percentage of female executives increased from 15% to 17% on our way to 25% by 2020. For more information, see 'People' on page 34.

In 2017, safety performance was a concern. The Frequency Index of all DSM Recordable Injuries deteriorated from 0.33 to 0.36 bringing us further away of our 0.25 target in 2020. There were serious incidents, including a tragic fatal accident at our plant in Augusta (Georgia, USA) on 27 September 2017. The root causes of this incident, as well as the lack of further improvement versus last year's performance, have been thoroughly investigated. Lessons learned and improvement actions are being implemented. For more information, see 'What still went wrong in 2017' on page 132.

Extracting value from our partnerships

In the years preceding Strategy 2018, DSM established joint venture partnerships for our former pharma activities (DSM Sinochem Pharmaceuticals and Patheon) and for the remaining bulk chemical businesses (ChemicalInvest) in order to complete the transformation of our portfolio. These partnerships were created with a view to ultimately exit and monetize these businesses.

In 2017, DSM extracted significant value with the sale of the remaining stake in Patheon to Thermo Fisher Scientific Inc., bringing the total cash proceeds from the exit from our former pharma custom manufacturing activities to approximately €2 billion over the years. The remaining two partnerships, DSM Sinochem Pharmaceuticals and ChemicalInvest, both showed solid results in 2017. For more information, see 'Partnerships' on page 97.

Regular strategy review process for the period beyond 2018

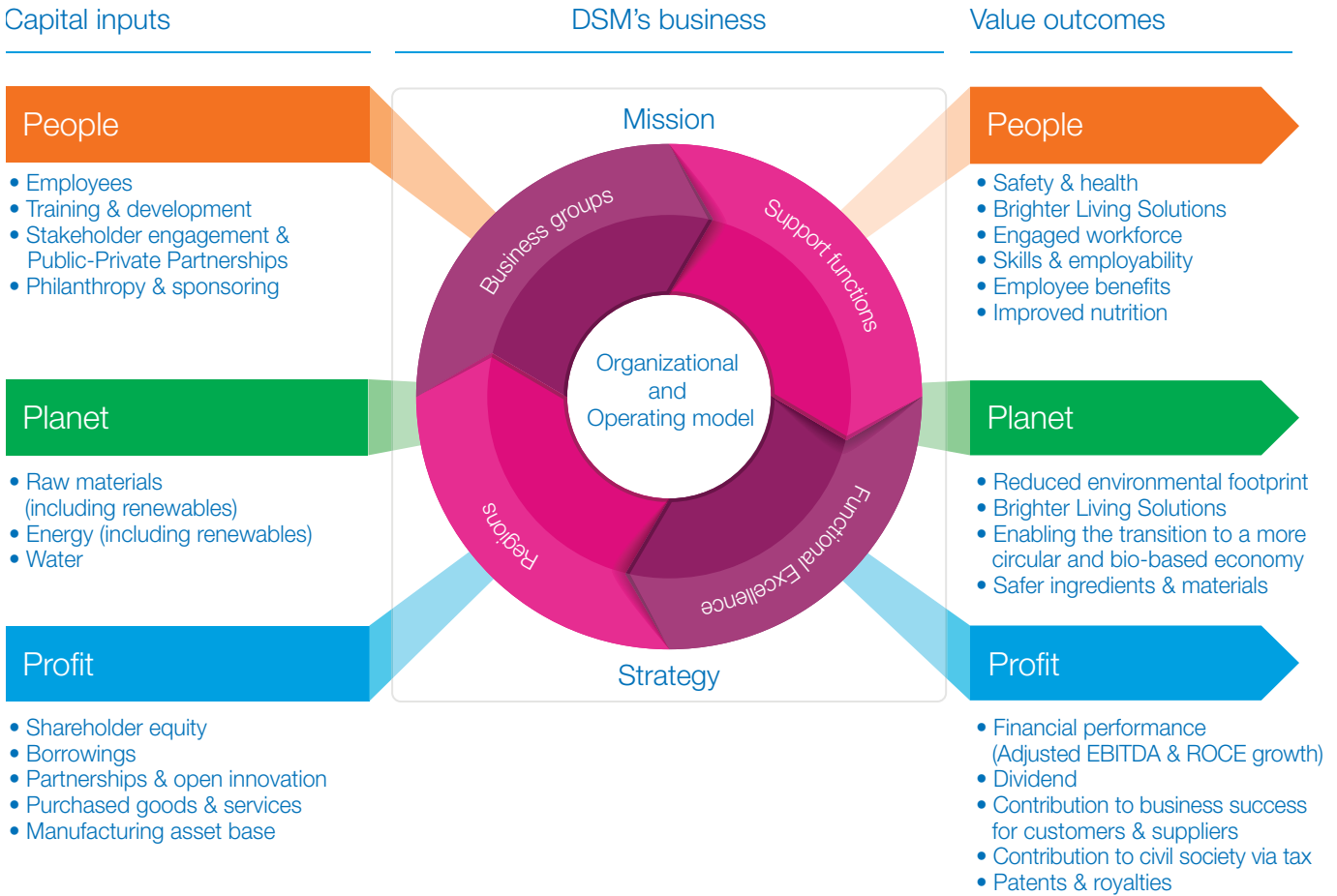
In 2017, we delivered for the second year in a row well ahead of our original ambitions, set for the three-year strategic period 2016-2018, having achieved EBITDA growth rates and improvements in return on capital double the original targets set. All businesses delivered on their ambitious growth initiatives and are making good progress with their focused innovation programs. We are also well on track with our cost reduction and efficiency improvement programs. Furthermore, we have successfully divested Patheon ahead of schedule, realizing total proceeds of approximately €2 billion over recent years.

With all of these developments ahead of plan, we brought forward our regular strategy review process for the period beyond 2018.



The members of the Executive Committee (from left to right): Philip Eykerman (Strategy and M&A), Judith Wiese (People & Organization), Chris Goppelsroeder (Nutritional Products), Feike Sijbesma (CEO/Chairman), Geraldine Matchett (CFO), Dimitri de Vreeze (Materials) and Rob van Leen (R&D and Innovation).

How DSM creates value for its stakeholders



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



The diagram here is based on the International Integrated Reporting Council's Integrated Reporting <IR> framework and gives an overview of how DSM creates value for stakeholders based on six capital inputs:

- Human capital
- Societal & relationship capital
- Natural capital
- Financial capital
- Intellectual capital
- Manufactured capital

Since 2002, we have reported on our performance in terms of People, Planet and Profit, and so the six capitals shown here continue to be clustered accordingly.

DSM'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.

We seek to minimize risk and take advantage of the opportunities around megatrends, thereby transforming the capital inputs into value and positive impact. A key part of our strategy, aside from our financial targets, is to continue to strengthen our commitment to sustainability. We especially try to have a positive impact through our engagement related to the Sustainable Development Goals (SDGs). DSM engages on all 17 SDGs, especially on the five shown in this figure. For more information, see 'DSM and the Sustainable Development Goals' on page 10 and throughout this Report.

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.

Stakeholders

DSM works with stakeholders that operate within our value chain, such as customers, employees and suppliers, as well as stakeholders outside our value chain including investors, governments and civil society. We have regular open discussions about topics that are relevant to our operations and our impact on society. These conversations shape how we execute our strategy, including risk management, materiality and new business opportunities. The needs and values of our stakeholders must be balanced with our own objectives.

Customers

Our customers are key stakeholders. They drive our business. We work extensively with customers to strengthen our commercial and strategic relationships. For information on DSM's business and customers, see 'Review of business' starting on page 68.

Employees

DSM's employees represent 100 nationalities, working at more than 200 sites and offices in 46 countries worldwide. We aim to provide a healthy, diverse and safe working environment for all our employees, including contractors. For information on how DSM engages employees, see 'People' on page 34.

Suppliers

DSM's supply chain consists of more than 34,000 suppliers. Suppliers are important partners in achieving our sustainability goals, and we work closely with them through our Supplier Sustainability Program.

Investors

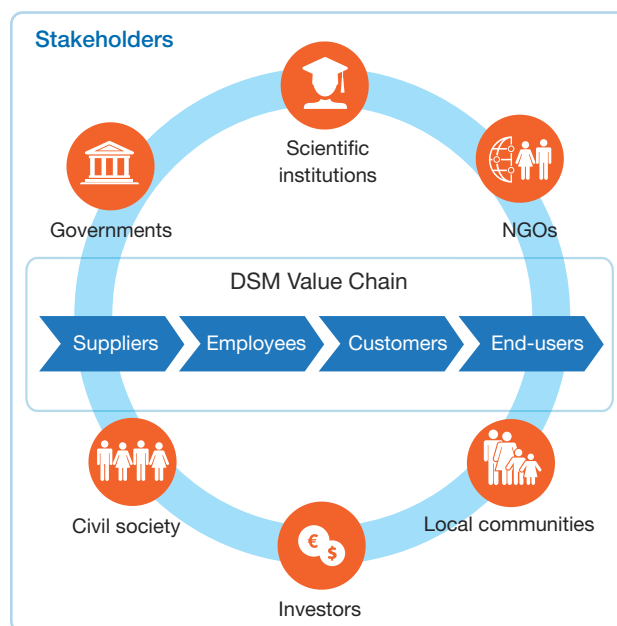
DSM actively communicates with investors and with the analysts advising them. We provide quality information about developments at DSM, ensuring that relevant information is equally and simultaneously provided and accessible to all interested parties.

Scientific research institutions

DSM openly collaborates with renowned universities and science institutes such as the European Knowledge and Innovation Communities, the University of Ulster in Coleraine (United Kingdom), and MIT in Boston (Massachusetts, USA). We provide funding and also share knowledge, research and facilities.

NGOs

DSM engages with NGOs and other organizations to work toward solutions for the world's societal challenges.



Local communities

It is important that DSM fosters a strong relationship with the communities where we operate. We engage and inform our local stakeholders through open days, news bulletins, social media and other initiatives.

Governments

Engaging with governments is increasingly important, especially considering DSM's commitment to the Paris Agreement and the SDGs. We engage with governments directly as well as through coalitions and trade associations. As stated in our Code of Business Conduct, we do not make political donations.

Civil society

In addition to the engagements we have with society through NGOs, local communities and other initiatives, DSM also engages in philanthropic events and sponsorship activities. See 'Philanthropy and sponsorships' on page 150.

For more information on how DSM engages with each of these stakeholders, see 'Stakeholder engagement' on page 139.

Materiality

Materiality is a way for companies to identify and analyze the topics that could have significant social, environmental, financial or reputational impact on their business, and which are important to the company's stakeholders. These topics are called material topics. DSM regularly reviews the material topics that could impact us. We chart these in a materiality matrix, which is refreshed annually.

Our refresh in 2017 included a big data study that analyzed the public disclosures of thousands of relevant stakeholders. This study was supplemented with desk research as well as interviews with key stakeholders. The 2017 topics and matrix were further refined during an internal workshop with DSM employees from various disciplines and later fine-tuned through interviews with the Executive Committee and discussions with the Sustainability Leadership Team. The matrix was compared with the Corporate Risk Assessment procedure to make sure that all relevant subjects were addressed from a materiality and/or risk perspective. Finally, it was approved by the Managing Board.

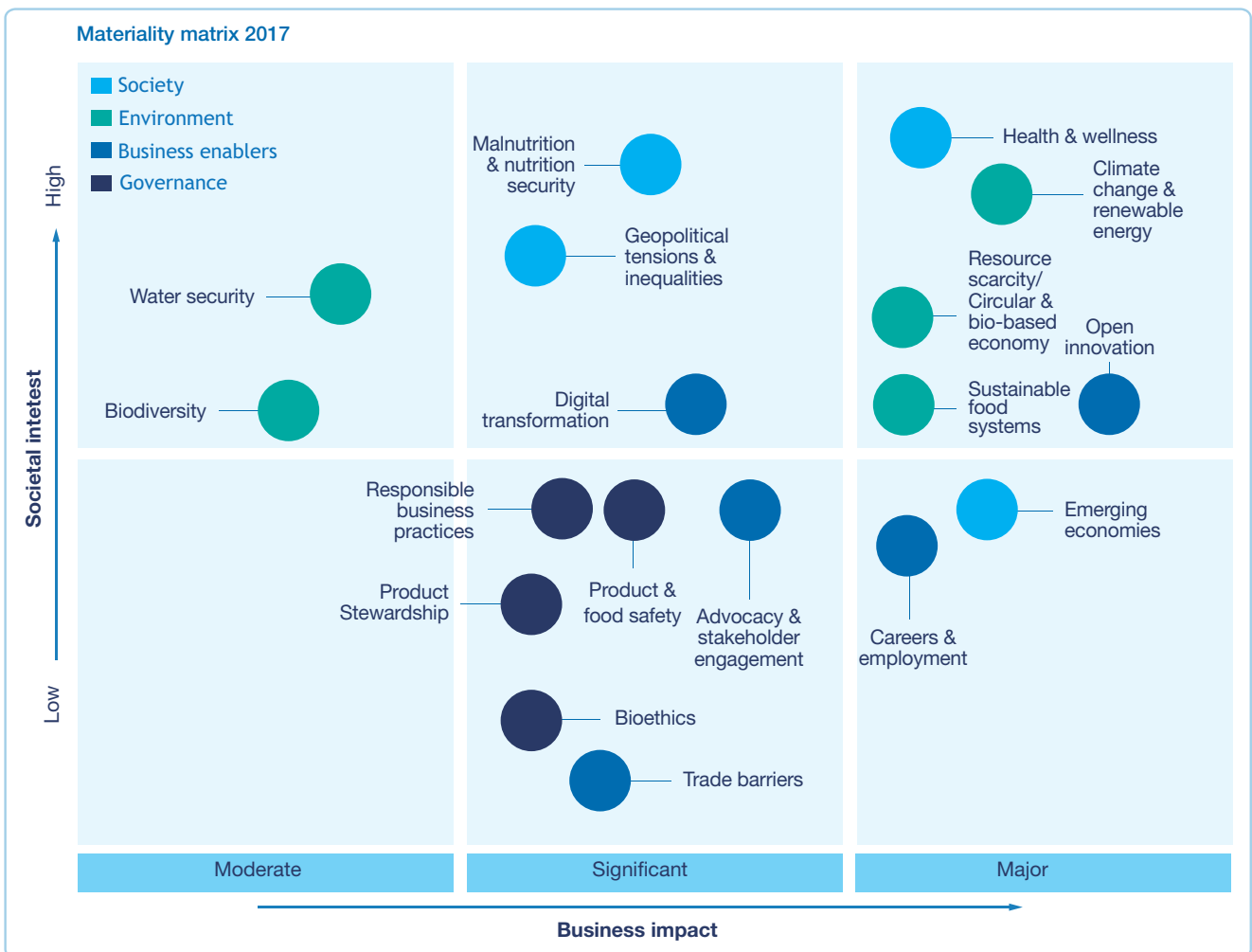
Changes in 2017

The layout of the materiality matrix was improved in 2017 to increase clarity. The new matrix is consistent with 2016, however, it does not correspond one on one. The matrix has six areas that represent the range of societal interest in each topic and potential business impact.

As a result of the review process, some topics have been adjusted:

- 'Product Stewardship' was identified as a new topic.
- 'Taxation' and 'Transparency & reporting' were moved under the umbrella of 'Responsible business practices'.
- 'Advocacy & reputation' was renamed 'Advocacy & stakeholder engagement'.
- The subtopic of overweight/obesity is now included in 'Health & wellness' rather than 'Malnutrition & nutrition security'.
- 'Malnutrition & nutrition security' focuses on the insufficient intake of (micro)nutrients and access to food that is calorically and nutritionally sufficient.

For more information on DSM's positions on relevant societal issues, see the company website.



For more information on Materiality, see 'Management approach for material topics', on page 144.

Collaborative platforms and networks

DSM collaborates with like-minded peers through platforms and networks that align with our sustainable growth areas: nutrition, climate and energy, and circular and bio-based economy. Through these collaborations, we develop new social and environmental measurement and performance standards, help shape the business community's contributions to the Sustainable Development Goals (SDGs) and act as advocates on material topics such as 'Climate change & renewable energy', 'Malnutrition & nutrition security' and 'Resource scarcity / Circular & bio-based economy'. In this section, we describe some of the most significant initiatives.

World Economic Forum (WEF)

DSM is a strategic partner of WEF and we attended their meetings throughout 2017, including the Annual Meeting in Davos. We further strengthened our presence at regional meetings, including in Africa and Latin America as well as Asia, to highlight key partnerships and initiatives concerning nutrition and climate change. We participated in many projects and initiatives of WEF, including the Compact for Responsible and Responsive Leadership, the New Vision for Agriculture and the Responsible Battery Alliance.

Our CEO Feike Sijbesma co-chaired the inaugural Sustainable Development Impact Summit in New York in September. This summit provided a new platform for strengthening public-private engagement to advance creative solutions and deliver on the ambitions of the 2030 Agenda for Sustainable Development. He also co-chaired the Consumer Governors and the CEO Climate Alliance (formerly WEF CEO Climate Leaders).

World Business Council for Sustainable Development (WBCSD)

DSM is a member of WBCSD and participates in a number of its working groups and coalitions. DSM is one of the founding members of Food Reform for Sustainability and Health (FReSH), a coalition between WBCSD and EAT, a foundation focused on food systems. With 40 companies, FReSH aims to transform global food systems so that all people can have healthy diets from food that is produced responsibly and with respect for the planet. DSM is a member of the Program Board and co-leads a number of workstreams, applying our science and business insights to help shape the direction of this coalition.

As a member of the WBCSD working group called Reporting Matters, DSM contributed to the development and launch of The Reporting Exchange platform. This platform provides a one stop shop for non-financial mandatory and voluntary reporting provisions from around the world and will be community managed. At launch, more than 1,600 provisions were already listed.

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 were in the Leadership Group of the global campaign 'below50'. The 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.

Toward the end of 2017, DSM joined the WBCSD's new circular economy program, Factor10, as a founding member. This new program will kick-off in 2018. As co-chair of the program, we will focus on circular metrics, as well as developing circular blueprints for the built environment, automotive and bio-economy sectors. The term built environment refers to human-made surroundings.

Accounting for Sustainability (A4S)

Our CFO Geraldine Matchett continued her active role as Co-Chair of the A4S CFO Leadership Network. This network brings together leading CFOs to help embed the management of environmental and social issues into business processes and strategy, particularly through the finance function. She is a signatory to the A4S CFO statement of support for the Taskforce for Climate-related Financial Disclosures recommendations.

DSM contributed in particular to the A4S Culture project, which aims to create a shift in the culture of the finance profession in organizations that already have a strong focus on sustainability. This includes showing finance professionals why and how they can play a part in delivering sustainability initiatives by motivating, empowering and inspiring them to make the changes required.

Carbon Pricing Leadership Coalition (CPLC) convened by the World Bank

In April, our CEO Feike Sijbesma's role as Co-Chair of the High Level Assembly of the CPLC was extended for a second year. 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 is also mobilizing business support to put an internal price on carbon. DSM applies an internal carbon price of €50 per ton CO₂eq when reviewing large investments. In January, Mr. Sijbesma was appointed, together with Kofi Annan and Christiana Figueres (former Executive Secretary of UNFCCC, the UN's climate organization), a 'Climate Leader' by the World Bank Group.

At various high-level events throughout the year, such as New York Climate Week and the UN Climate Conference COP23, Mr. Sijbesma shared DSM's experience with carbon pricing. He called on other businesses to implement an internal carbon price and advocated for embedding a price on carbon in global

financial systems. He reinforced this message at the One Planet Summit in Paris organized by President Macron in December, where Mr. Sijbesma joined heads of government and leaders in public and private finance, and was invited to address the summit.



DSM CEO Feike Sijbesma at the One Planet Summit in Paris.

Ellen MacArthur Foundation

We continued our engagement with the Foundation and CE100. CE100 is the Foundation's global platform that brings together companies, emerging innovators, universities and cities to accelerate the transition toward a circular economy. In 2017, we collaborated on a CE100 project with Essity, IKEA and Tetra Pak to promote the role of renewable materials in a circular economy. We also offered targeted employees an online circular economy training through the CE100 and University of Bradford School of Management (UK).

Circle Economy

We renewed our membership with Circle Economy, a social enterprise that emphasizes practical and scalable solutions in the transition, and joined their Built Environment program to work with construction partners in the value chain.

RE100

Our engagement with RE100, the world's leading campaign to scale corporate sourcing of renewable power, continued throughout 2017. We participated in the learning opportunities, conferences and advocacy opportunities offered to DSM in the EU, US and increasingly in China. As part of our RE100 commitment, we shared our insights through webinars, presentations and other engagements on our long-term commitment with fellow RE100 members AkzoNobel, Google and Philips to jointly source power from wind energy projects in the Netherlands. More information on renewable energy can be found in 'Planet' on page 46.

We Mean Business

We Mean Business activates hundreds of companies and investors to commit to low-carbon initiatives. In 2017, we

collaborated on the International Business Declaration that was launched at the One Planet Summit and continued to work together on the Carbon Pricing Corridors project, led by CDP, CPLC and We Mean Business. This project aims to enable large market players to define the carbon prices needed for industry to meet the Paris Agreement. We also worked on a number of advocacy and communications activities around 'below50' and renewable energy.

Dutch Sustainable Growth Coalition (DSGC)

DSM continues to engage with DSGC. Together we have a clear shared roadmap for engaging with the SDGs and working on the scale up of innovations under development. The DSGC also acted collectively and responsibly to share its views on climate policy with the incoming Dutch government.

Catalyst

Catalyst, Inc. is a non-profit organization that promotes inclusive workplaces for women. DSM sponsors Catalyst through the role of our CEO Feike Sijbesma on the Board of Directors and our CFO Geraldine Matchett on the European Advisory Board. In 2017, Mr. Sijbesma was recognized as a Catalyst CEO Champion for Change for his efforts to support positive change in the areas of gender balance, diversity and inclusion. DSM supported Catalyst's global communications campaign launched on International Women's Day. The campaign raised awareness and promoted progress on issues related to women in the workplace. In November, the Catalyst Europe Advisory Board visited DSM to discuss advancing women in business.

UN World Food Programme (WFP)

In place since 2007, 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. Together, DSM and WFP make a difference to millions of people.

In 2016, WFP reached 31.1 million beneficiaries with food that was improved by the DSM-WFP partnership. Additionally, DSM and WFP collaborate on training and development initiatives and on employee fundraising campaigns.

UNICEF

The DSM-UNICEF partnership has been in place since 2013. In 2017, DSM signed an agreement with UNICEF and the humanitarian nutrition think tank Sight and Life to deliver better nutrition to about 400,000 children, starting with the micronutrient powder pilot in Nigeria, including Bauchi in the North East and Kebbi in the North West. The partners will also advocate on the global level for microsupplement intervention in other places where people suffer from malnourishment. The partnership continues its capacity support of the African Nutrition Leadership program.

World Vision

DSM signed an agreement in January 2017 with World Vision International and Sight and Life for 'Joining forces for last mile nutrition'. The parties have worked on improving the raw material quality and access in Rwanda for Africa Improved Foods and has also initiated project EGGciting, focusing on eggs as an important nutrition source.

At DSM, we leverage our scientific excellence, technical expertise and large customer base to facilitate the development and supply of innovative nutrition, formulation and fortification.

Partners in Food Solutions

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 dedicate their technical and business expertise to improving the performance of food processors and millers in Africa.

Scaling Up Nutrition

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. DSM's CEO Feike Sijbesma is a member of the Lead Group of the SUN Movement and Co-Chair of the Advisory Group of the Network. DSM's VP of Nutrition in Emerging Markets and Public Private Partnerships, Fokko Wientjes, is on the executive board of the SUN Business Network.

Via the network, as well as the WFP partnership, DSM supported a number of SBN projects in Zambia, Zimbabwe and Malawi. DSM advocates for business to take a leading role on this important issue.


For information about other nutrition initiatives and partnerships, such as Africa Improved Foods, Nutrition Improvement Program, and Sight and Life, see 'Nutrition' on page 68 and 'Philanthropy and Sponsorships' on page 150.



Africa Improved Foods' Aline Batumuliza (left) and DSM's Fokko Wientjes (right) working together with the World Food Programme to deliver Super Cereal Plus, the fortified food that DSM developed for malnourished children in Africa.


External recognition

We are proud when our efforts are recognized by others. Below is a selection of some awards and recognition that DSM received from NGOs and trade organizations, customers, suppliers and academia in 2017. A full list of our recognitions can be found on the company website.

Organization	Recognition
	In May, DSM was presented with the 2017 BioEconomy Leadership Award at the 39th Symposium on Biotechnology for Fuels and Chemicals . This fairly new award recognizes the companies or NGOs that have significantly advanced the development of a renewable resource-based fuels and chemicals economy. Being selected as an early recipient speaks volumes about how influential DSM has been in developing bio-based products and advancing the bio-based economy.
	In July, DSM was assessed as an ESG (Environmental, Social and Governance) leader within the chemicals industry by Sustainalytics , ranking number 1 out of 130 companies.
	In September, DSM was named among the world leaders in the Materials industry group in the Dow Jones Sustainability World Index in recognition of the company's consistent and longstanding commitment to sustainability. DSM has been among the global leaders for the past 14 years and number one in the sector seven times.
	In September, DSM was listed in 2nd place in Fortune Magazine's 3rd annual Change the World list, which recognized 56 companies that have had a positive social impact through activities that are part of their core business strategy.
	In October, the World Resources Institute (WRI) honored DSM's CEO Feike Sijbesma at its 2017 Courage to Lead dinner in New York City, recognizing his bold leadership to solve global challenges. According to WRI, Mr. Sijbesma has been an outspoken champion of reimagining the economic system and corporate responsibility to go beyond profit and incorporate people and planet in value creation.
	In October, DSM was awarded a position on the 2017 A List for climate and water by CDP , the non-profit global environmental disclosure platform. At DSM, we report our climate actions to CDP and we are one of only 28 companies to score an A for both climate and water, in recognition of our actions in the reporting year to manage environmental risks, cut carbon emissions and enhance water stewardship.
	In November, DSM China was named in the '2016-2017 Most Respected Companies in China' list organized by The Economic Observer , one of the major economic-focused newspapers in China. The award recognizes companies that have demonstrated excellence in areas including financial performance, operations and management, innovation and corporate social responsibility.





 **@Oray_31**
Oreofe Odunsi
Just registered for the
@OYWColombia Proud to see
@DSM as one of the sponsors!!!
Bogotá, Colombia

DSM is committed to inspiring and developing talented people. We are building a company culture of diversity and equality. In 2017, more than 20 DSM employees from across the globe participated in One Young World in Colombia, where leaders and young people came together to advance progress on important societal issues. We also sent 20 women and men to the Women's International Networking Conference in Norway.



People

Engaging our employees

75% of employees feel good about working at DSM according to our engagement survey, a **4%** jump versus 2016.

3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



10 REDUCED INEQUALITIES



We are building an inclusive culture where each employee feels he or she can contribute to a much larger global conversation.

27/73

Ratio female/male stable versus 2016

17%

Female executives +2% up from 2016

71%

Inclusion Index up from 70%¹ in 2016

0.36

Frequency Index of Recordable Injuries, a performance decline versus 0.33 in 2016 (per 100 DSM employees and contractors)

¹Restated. See 'Careers & employment' for more information.

DSM aspires to a high-performance culture that supports the 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. Above all, we aspire to be an injury- and incident-free organization.

In 2017, DSM's Executive Committee welcomed Judith Wiese. Mrs. Wiese officially replaced Peter Vrijzen, EVP DSM Group People & Organization (P&O) as of January 2018. She has held a number of leadership positions in various regions of the world and within different sectors, focusing on P&O, talent management and organizational development.

Our People Strategy 2018 supports the company's overall strategy by focusing on three pillars: 1) agile employees, 2) skilled employees, and 3) accountable employees. These three pillars reinforce the most relevant material topics for our people:

- Health & wellness
- Careers & employment
- Responsible business practices

For more information about our People performance, see 'Sustainability Statements - People' on page 137. See also 'How DSM creates value for its stakeholders' on page 24 and 'Stakeholders' on page 26.

Health & wellness

	Aspiration	2017	2016
<i>Occupational safety</i>			
- Frequency Index REC	0.25		
	in 2020	0.36	0.33
- Frequency Index LWC		0.16	0.14
<i>Process safety</i>			
- PSI Rate	0.15		
	in 2020	0.19	0.28
<i>Occupational health cases</i>			
		14	6

Occupational and process safety

Employee health includes safety at work. We strive to be an incident- and injury-free company. At the end of the day, people should leave work exactly as they came, if not better. So it is with deep regret that we report a fatal accident that occurred at our DSM Resins & Functional Materials site in Augusta (Georgia, USA).

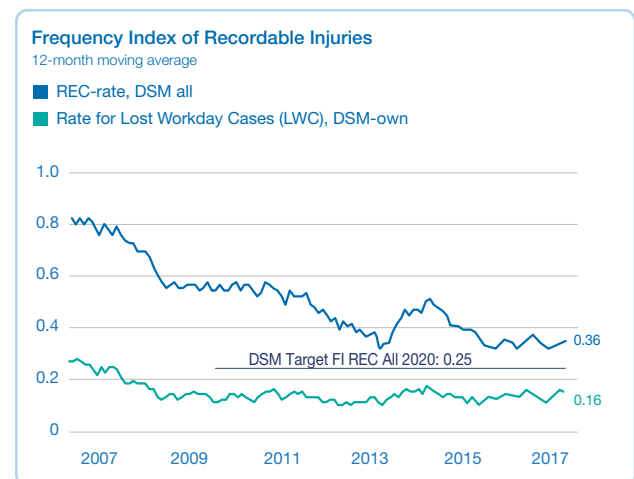
Both occupational and process safety are extremely important to us. Occupational safety is the safety of people (employees and contractors). Process safety is the safe operation of facilities. We set targets, define actions and monitor safety

performance as described in the DSM Responsible Care Plan 2016-2020. We report our occupational and process safety performance with frequency indexes. For a full description of these indexes, see 'Explanation of some concepts and ratios' on page 240.

Occupational safety

In 2017, the Frequency Index of all DSM Recordable Injuries increased from 0.33 to 0.36, bringing us further away from our 2020 target of 0.25. The Frequency Index of Lost Workday Cases for DSM employees was 0.16 in 2017 versus 0.14 in 2016.

The Frequency Index of Recordable Injuries among contractors improved from 0.56 in 2016 to 0.46 in 2017. This can be attributed in part to the enhanced effectiveness of our company's Life Saving Rules, especially those related to work permits.



Despite the improvements in contractor safety, overall safety performance in 2017 was a concern. Several incidents early in the year triggered us to host a safety workshop in June. Thirty-five executives from across DSM gathered to reflect and build momentum for better safety awareness and performance. As a result, a new program called Living Safety 'I care, We care' was rolled out globally to emphasize the importance of:

- visible leadership by all employees;
- safety knowledge and skills; and
- increased communication about safety.

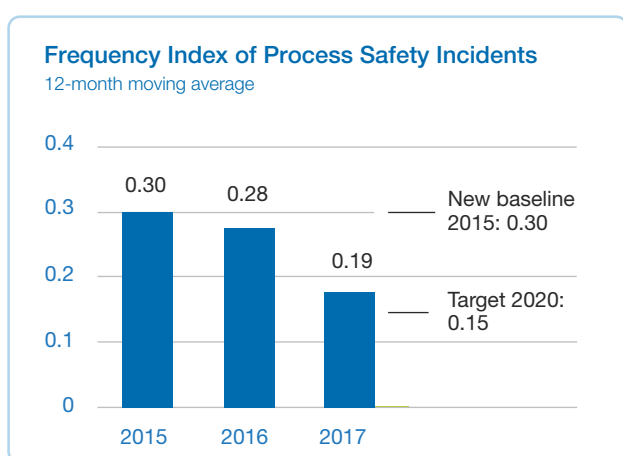
DSM designed a new onboarding course for executives to further emphasize safety as a company value and, in addition, our leadership teams are participating in a series of workshops called How to Live Safety. DSM is also developing a more standardized approach for certain high-risk activities.

Tragically, and despite these initiatives, there was a fatal accident at our DSM Resins & Functional Materials site in

Augusta (Georgia, USA) in September 2017. One contractor was fatally injured, another was severely injured and a third suffered less severe injuries in the same incident. The root causes have been thoroughly investigated and the lessons learned are being implemented. We are committed to the safety of all workers and will continue to pay close attention to contractor safety. DSM is supporting the affected families.

Process safety

Process safety incidents are rare but can have a major impact on people and the environment. Since 2015, process safety has been measured by DSM according to the International Council of Chemical Associations (ICCA) standards, with a target for 2020 of 0.15.



The Process Safety Incident rate improved from 0.28 in 2016 to 0.19 in 2017. Most incidents were related to the unintentional release of substances from plants or storage facilities and were remediated without further consequence. There was a small number of other incidents, which are described in the chapter 'What still went wrong' on page 132.

DSM's safety planning focuses most on incidents and situations that pose the highest risk and the steps we can take to avoid them. Our 12 Life Saving Rules reflect those risks and serve as a standard for safe day-to-day operations. They are included in the internal auditing system, which is applied at all levels of the organization — corporate, business groups and sites.

Employee health

Like all people, DSM employees deserve good working conditions. We use an Occupational Health Module based on three pillars: prevention, primary care and promotion.

Our approach to the prevention of safety and health issues is through employee training on industrial hygiene, including physical hazards and exposure. Primary care includes our emergency preparedness, first aid and our site-based medical professionals. Promotion of good health is addressed through

our approach to health and fitness, as well as our Safety, Health and Environment policies.

DSM is encouraging a culture of health with our Vitality@DSM program. Vitality@DSM is a voluntary program that helps employees track and assess their physical, social and mental well-being. More than 1,000 people participated in 2017. Sixty-seven percent of the participants reported low lifestyle-related risks. Others indicated moderate to high risks, mostly because of stress and lack of exercise. Participants received customized advice to help improve their overall well-being, support early intervention before disease and maintain employability. In 2017, compared to 2016, the productivity gains attributable to the program reached approximately € 120,000 according to the group report.

DSM FIT | Worklife Center was created from the integration of the Occupational Health Center, the Employability Center and the Mobility Center to improve the vitality and employability of people during their careers at DSM. This addresses two concerns: our responsibility for our employees and fostering a vital workforce that is best able to support our company goals. We believe in "brighter you, brighter us".

In addition, DSM continued our Global Corporate Challenge, a team-based approach to better health. In 2017, 360 employee teams participated, up from 83 teams in 2016. Seventy-seven percent of the 2,520 participants achieved the recommended daily levels for physical effort of 10,000 steps per day. Based on this success, DSM will roll out an even more comprehensive health promotion program in 2018.

Local wellness initiatives are on the rise. For example, DSM Nutritional Products in Dalry (United Kingdom) received an award from the Chemical Industries Association for their commitment to health leadership.

Occupational health cases

Even with these programs, sometimes work negatively impacts employees. In 2017, there were 14 occupational health cases reported with a clear link to physical working conditions. Two cases were related to sensitization to certain chemical/biological substances and two were related to hearing loss due to noise in the workplace. The remaining cases were mainly related to ergonomics at the workplace. At the DSM Jiangshan (China) site, which we acquired in 2015, 14 people have indications of hearing loss. We discovered this in December 2017 as part of the site's integration program, during which improved medical checks are performed. This issue is still under investigation and therefore not yet included in the reported figure.

Another area of concern is stress. High stress levels, whether from work or private life, can negatively impact personal health, well-being and employability. Stress sometimes goes unacknowledged by the affected person or the company and

therefore it may not be fully captured in our occupational health reporting.

Privacy concerns or cultural factors may influence employees' willingness to report and discuss personal health issues, so some occupational health cases may go unreported. DSM continues to raise awareness about stress and other occupational health risks and encourages transparency.

Careers & employment

	Aspiration	2017	2016
Employee Engagement	75% by 2020	75%	71%
<i>Inclusion & Diversity</i>			
- Female executives	25% by 2020	17%	15%
- Under-represented nationalities	60% by 2020	56%	53%
- Inclusion Index ¹		71%	70%
<i>Learning and Development</i>			
- Training hours per employee ²		19	25

¹ The Inclusion Index is based on a different mix of questions in the 2017 Employee Engagement Survey in comparison to previous years. The Inclusion Index figure for 2016 has been recalculated to reflect this change in the mix of questions (resulting in a change for the 2016 Inclusion Index from 73% to the above mentioned 70%).

² As of 2017, development training hours/employee is partly measured using a new system with a stricter definition. Figures of previous years cannot be recalculated according to the new definitions. As a result, the 2017 figure cannot be compared to the figures of previous years.

Workforce engagement

An engaged workforce is essential for DSM. The DSM Employee Engagement Survey, run annually since 2007, helps us understand how employees feel at work and where we need to improve. The goal is to ensure that people are proud to work at DSM and that they can excel. The survey measures four attributes: commitment, pride, advocacy and satisfaction.

Since 2015, we alternate every other year between the comprehensive version and what we call a 'pulse' survey – a shorter version that still collects essential information about safety, engagement, inclusion and other key themes. The two-year cycle gives teams more time to make meaningful change.

The 2017 survey, which was a 'pulse' survey, was sent to all employees and was available in 21 languages. It had an 82% response rate. The Engagement Index jumped 4% to a score of 75%. With the solid results in 2017, we have already reached our target of 75% by 2020.

The results showed encouraging movement in key areas. Employees confirmed their trust in our strategy, with 82%

agreeing with the sentiment "I believe DSM has a promising future" versus 78% in 2016.

The company has also improved people management, according to the results. For example, 64% of employees agreed "My manager has invested time and effort in my growth and development", up from 59% in 2016 after a drop from 63% in 2015. We were encouraged to see that respondents feel inspired by our managers and that employees perceive that more time and effort was spent on development in 2017. These elements, among others, are key for the personal growth and satisfaction of all employees. Still, there is room for further improvement and we will continue to develop our people managers.

“ Our people make all the difference. Providing space to learn, grow and make a meaningful contribution is key to our people's engagement and DSM's success. ”

Judith Wiese, DSM Executive Committee

While we see an increase in questions relating to development, we see that the satisfaction on career opportunities is slightly decreasing. Going forward, we need to make sure our employees feel that the effort that is put into their development results in better career moves, especially for our early career talent.

We are very proud to see the increase in engagement. It shows us our employees' optimism and recognition that we are on the right path, both in terms of business as well as people practices.

Inclusion & Diversity

DSM's Inclusion & Diversity activity focuses on two main topics:

- Increasing representation of women and under-represented nationalities at executive level and throughout our management pipeline in order to fuel innovation and growth in every country where we operate
- Creating an inclusive work environment where each employee contributes 100%

We aim to have 25% female executives and for at least 60% of our executives to come from under-represented nationalities by 2020. We achieved our short-term target of an improvement in each by 2% in 2017 thanks to a renewed focus and commitment of all businesses and functions. The percentage of executive women in 2017 reached 17%, while the number of under-represented nationalities at executive level reached 56%, just a few points away from our long-term aim.

In 2017, new targets were also added to increase the diversity of the DSM pipeline below executive level. These targets focus both on gender and nationality mix, and were defined in the Inclusion & Diversity aspirations of our major business groups and functions. Both measures saw a positive trend across all of our businesses and functions, with representation growing an average of 2% and 3% respectively versus 2016.

In line with the Dutch Corporate Governance Code, the Supervisory Board drafted a diversity policy for the Executive Committee, Managing Board and Supervisory Board. This policy aims for a 30% gender balance and, for the Executive Committee and Supervisory Board, no more than 50% of members from one nationality. For more detail see 'Corporate governance' on page 101.

With the mid-year appointment of Judith Wiese in 2017, our Executive Committee's gender and nationality diversity is 29% and 57% respectively. Our Managing Board, consisting of one female and two male members, is fully aligned with the 30% prescribed by Dutch legislation in terms of gender balance. Our Supervisory Board is also 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. 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 our Executive Committee has devoted considerable energy to this topic in order to stimulate change. Our CEO Feike Sijbesma signed a commitment as one of the Catalyst CEO Champions For Change, signaling the company's active support for gender equality. In 2017, we ran several external outreach campaigns, such as 'It's the balance that makes us stronger', which celebrated the company's achievements on gender diversity. Centered around social media, it features unscripted, personal video profiles of DSM's senior women leaders and directs viewers to a LinkedIn hub that offers a place for women all over the world to connect. In addition, we are building a strong, diverse internal talent pipeline to drive our future growth aspirations.

Inclusion has been a central focus area in 2017. Several steps were taken to begin meaningful conversations and raise awareness around this topic such as training for all executives,

a broad online communication and awareness campaign for more than 2,000 people managers, and the participation of about 20 female and male employees in the Women's International Networking Conference in Oslo (Norway). In addition, employees shared stories about what inclusion means to each of them in our internal, employee-led 'I for Inclusion' digital campaign.

DSM's inclusion efforts are monitored on a yearly basis via the Employee Engagement Inclusion Index, which improved over the past year, moving from 70% in 2016 to 71% in 2017. This consistent improvement suggests that progress is being made in creating and maintaining inclusive environments across the company.

Going forward, DSM will also continue to address the geographical distribution of executives and other key functions keeping a keen eye on nationality balance, as this remains an essential aspect to foster at this stage.

Learning and development at DSM

Learning and development grows our employees and leaders, which in turn facilitates our company's growth.

Our employees are curious people and we encourage a culture of continuous learning through a 70:20:10 approach:

- 70% learning through experiences, like guided on-the-job assignments
- 20% through other people, like peer learning opportunities and mentoring
- 10% more formal learning through classroom training and digital learning

With this approach, people learn from experience, feedback, reflection, experiments and mistakes in addition to training courses. On average, the DSM employees who are registered in our training portal had 19 hours of developmental training in 2017.

DSM works in close cooperation with leading international business schools and global learning content providers such as Duke Corporate Education, Ashridge Executive Education, Vlerick Business School, and CrossKnowledge, to design and deliver high-quality learning activities for employees around the world.

We are making it easier to access learning opportunities through a more user-friendly platform. A new global Learning Management System that is part of DSM's integrated Talent Suite system is replacing legacy systems. This way, employees have a one-stop shop for all company learning activities, including development and mandatory training. Processes for approval, registration, cancellation, evaluation and reporting on learning and development are now simpler and consistent worldwide.

Additionally, in April 2017, DSM extended access to our online platform, called Bright Learning, to all employees. A new smartphone app improved the user experience. Now people can learn anytime, anywhere. This platform will be integrated with the new Learning Management System. Preparations and testing are underway.

Bright Mentoring

Bright Mentoring is a DSM program that connects people across the organization to encourage mentorship and learning through others. Benefits include:

- more cross-business networking;
- a better connection and understanding of the company strategy and different businesses;
- accelerated employee development and exposure; and
- mutual learning for mentor and mentee.

There are about 300 employees in mentoring relationships across DSM.

Developing leadership and people management

Developing our leaders and people managers is a priority. Launched in 2012, the DSM Leadership Model specifies the behavior we expect from our leaders and people managers. The model provides a common vision and language on leadership at DSM, which is now fully embedded in our key processes to hire, develop, evaluate and manage talent across the organization.

We recognize that throughout their careers, leaders go through several transitions. Our leadership programs support development through each transition: leading self, leading others, and leading leaders. In 2017, most of the design and development work took place, as did the first pilot sessions. We expect these programs to fully roll out in 2018.

In addition, we continued People Manager 2018, the monthly virtual campaign that highlights relevant topics for people managers specific to that time of year. In 2017, we enhanced this program with 32 in-person 'Meet, Share and Learn' sessions at key locations around the world. These three-hour trainings on challenging topics allow people managers to connect face to face with peers and role models, exchange experiences, learn and grow. With these sessions, we offered training to more than 420 people managers in goal-setting, talent and performance reviews, and development conversations.

To support Strategy 2018, DSM collaborated with Duke Corporate Education to create the DSM Lead & Grow program for our top 300 executives. Piloted in 2016 and rolled out in 2017, the program encourages our leadership to think and act differently, fully understand macro-economic trends, use creative and dilemma solving techniques to address roadblocks, and engage and develop our best talent.

Developing and managing our talent

Talent acquisition

In 2017, DSM continued to strengthen the Global Talent Acquisition organization, including some external hires in our own regional recruitment teams, and global functional expertise groups working around the world. Standardized processes and systems were implemented and a focus on emerging technologies has dramatically reduced DSM's reliance on external agencies. Our regional recruitment teams have closed more than 1,000 recruitments while reducing time to hire and focusing on quality hiring in line with our desire for diversity, inclusion and learning agility. Further social media outreach allowed us to become more proactive through dedicated campaigns, such as the campaign that featured some of our senior female leaders and helped build awareness of gender balance at DSM.

Talent management

In 2017, the new talent management approach implemented in 2016 was further leveraged and we were able to see positive progress in the key areas of identifying and developing future talent, strengthening succession for leadership positions, and upgrading our overall talent pipeline.

Identifying and developing future talent

One of the 2016 action points was to identify a broader pool of emerging leaders — early career talent who could be stretched into faster career development. Thanks to a modified approach, in 2017 we were able to define a deeper, more diverse pool of talents, almost doubled in size, and better representing our businesses, geographies and job levels. Within our senior talent group, we were glad to see retention rates above 80%, as well as very good career movements, including some cross-business shifts, which are key to helping us develop broader senior leaders. Going forward, we will continue to focus on career development, an area where we have not yet seen the acceleration we expect despite our progress, and where our Engagement Survey results still show frustration among the wider employee group.

Strengthening succession for leadership positions

Overall succession strength for our business and functional leadership teams has improved. A fewer number of positions show significant gaps. However, focus on this topic will continue throughout 2018, particularly considering the growth objectives we have for our businesses going forward. Regarding the DSM Leadership team, clear efforts were made to accelerate the development of the talent identified for these positions. All of them went through an executive development assessment and more than two-thirds of the identified employees took a developmental role in 2017.

Upgrading our overall talent pipeline

Overall actions were taken to continuously upgrade our talent pipeline, through a good inflow of new hires and internal promotions, bringing increased breadth and diversity, as well

as careful management of underperformers. In 2018, we intend to initiate specific intake programs at junior and senior levels to accelerate our progress in this area.

Accountability for performance

Accountability for performance plays an important role in achieving DSM's Strategy 2018. Over 13,000 employees have access to the digital evaluation tool for performance reviews. All other employees participate in performance evaluations on paper or with other local systems. Our approach to target-setting focuses on 'Fewer, Bigger, Better Goals' that are measurable, relevant and challenging. In 2017, the development plan was added to the performance review to link achievements, experiences and key learnings to future development activities.

Total rewards

DSM continued with the Total Rewards Strategy in 2017. This strategy supports business objectives with monetary and non-monetary rewards and is the reference for compensation and benefits plans across the organization. It is designed to:

- Pay for performance that supports business objectives;
- Help attract, engage and retain the right employees and reinforce desired behavior;
- Ensure consistency and fairness in our reward programs across employee segments and geographies; and
- Optimize and sustain DSM's investments in talent.

We took steps in 2017 to align and standardize salary structures on a global scale based upon the Total Rewards Strategy. This included rolling out a more streamlined approach to benchmarking. DSM now has a better understanding of competing employers and we can set target pay levels that drive performance across all areas and geographies. We also implemented a new global technology platform for a unified approach to salary adjustments. Together, these steps have given us a more consistent external-facing approach for better competitiveness and strengthened internal equity (comparable pay for comparable job levels).

New organizational and operating model

DSM continued to implement the new organizational and operating model as part of 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. The program has delivered the targeted benefits contributing to the total cost savings of about € 195 million (the high end of the targeted range) and a reduction of approximately 950 FTEs in staff and support functions (both against the baseline of 2014). About 55% of these were in the Netherlands. See also 'Strategy 2018' on page 18.

Good progress was made in implementing the new operating models for the various support functions, enabling them to deliver better service at lower cost. The Finance, IT and Purchasing shared services were integrated in the new DSM shared services organization with a global service center in India and a satellite in China. People & Organization followed at the end of 2017.

Additional efforts were made in internal communication concerning organizational change and company culture. More than 60 two-day workshops were organized for the employees in all support functions. These were aimed at creating a better understanding of the new operating model and encouraging the mindset and behavior necessary to make the new organizational set-up a success and to support DSM's ambitions.

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 and we actively engage with works councils.

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.



In 2017, we evaluated the current state of our culture agenda through interviews with more than 50 leaders and 100 talents across the world to get a better understanding on where emphasis is required.

In the area of 'External Orientation', we have intensified our focus on customer requirements and best practices in the markets. We collect insights across business groups and use these to become more customer-facing. Regarding 'Collaboration with Speed', changes to our target operating model improved our capability to leverage across business groups. The areas of 'Accountability for Performance' and 'Inclusion & Diversity' are discussed elsewhere in this chapter. The Managing Board supports and drives these values through leading by example.

Continuous improvement in operations

One of the ways in which we drive organizational performance is by fostering a culture of continuous improvement across manufacturing sites and supply chain environments. This mindset is driven by the DSM Integral Continuous Improvement (DICI) journey, which is currently running in approximately 65% of DSM's Manufacturing and Supply Chain organizations. The premix locations and some recent acquisitions are currently excluded from the DICI scope.

We focus on empowering our people so they can make the many small improvements that can have a significant impact on operations and on our employee engagement. This journey is being executed together as ONE DSM, which enables us to share and learn across sites and businesses much faster than before.

In Pune (India), the DICI journey has played a role in establishing a self-propelling continuous improvement culture. We empower shop floor operators to set standards, identify deviations and initiate their own problem solving. By working with local leadership, who coach and facilitate this process, we have achieved increased output and a significant step up in Safety, Health and Environment results.

The local team in Lalden (Switzerland) observed that changeover time was causing considerable performance issues. To address this, the team defined a new standard way of working and agreed on an ambitious target of 40% time reduction for changeovers. Times were measured and published. The target was achieved within a few changeover cycles. This improvement required no investment and resulted in an increase in production volume. This delivered an annual cost benefit of CHF 600,000.

Responsible business practices

International Labour Standards

DSM applies the International Labour Standards of the ILO. DSM respects the role of works councils and collective bargaining, and works with these groups in the countries and regions in which they are present. We develop social and severance programs in the event of significant reorganizations, such as in our current reorganization (see 'New organizational and operating model' in this chapter). DSM promotes employee empowerment and human rights protection and

maintains dialogues with employees and representative bodies to enable this.

Human rights

With our mission to "create brighter lives for people today and generations to come", DSM believes that respecting human rights is fundamental to delivering a more sustainable society. 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 to safeguard them. These include:


- 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.

DSM's commitment to human rights is defined in our position paper on the company website. The discussions around the development of our Human Rights Policy help embed the responsibility to respect human rights into the programs, policies and daily operations of all business functions and regions. DSM's global whistleblower policy (DSM Alert) is in place so employees and external stakeholders can 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. This assessment has shown that the categories of human rights most relevant and applicable to DSM are employees' working conditions, our supply chain and compensation. We conduct regular reviews of our rewards framework to make sure it meets the standards of our Total Rewards Strategy.

Beyond our own operations, potential labor and human rights impacts are handled through our Supplier Sustainability Program (SSP). We screen suppliers for potential human rights issues through sustainability assessments and audits. Read more about our SSP and how we manage potential human rights impacts within our supply chain on page 140.



 **@MIMcBurney**
It's a HUGE turnout for
#marchforscience in Chicago.
@DSM

On Earth Day, millions of people around the world joined the March for Science to promote science-based public policies including policies related to climate change. Hundreds of DSM employees joined the non-partisan rallies in cities like Washington, D.C. (USA), Chicago (Illinois, USA), Maastricht (Netherlands) and elsewhere. DSM also signed the letter "We're Still In", acknowledging that public and private actors, including the business community, are still committed to achieving the Paris Agreement on climate change.





@DSMNederland

Four go by bike to Sisseln (CH), bringing spades to start building the new Biomass generator #greenpower & heat Heerlen, The Netherlands

DSM operates more and more on renewable energy. We took another step forward in 2017 when our Sisseln facility in Switzerland broke ground on a new onsite biomass cogeneration plant that will reduce our carbon footprint by 48,000t CO₂eq a year. When the plant comes online at the end of 2018, it will produce steam from biomass locally sourced through certified sustainable forestry. Some of DSM's employees even rode by bike from the Netherlands to Switzerland to bring the spades for the groundbreaking.





Planet

There's only one Earth

62% Sales of Brighter Living Solutions (ECO+ / People+), working toward 65% by 2020

At DSM we reduce our environmental impact, enable our customers to do the same, and advocate for climate action.

6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



21%

Purchased electricity from renewable sources, up from 8% in 2016.

26%

Greenhouse-gas efficiency improvement cumulative versus 2008. Compared to 23% in 2016. Target 40-45% by 2025.

3%

Energy efficiency improvement cumulative versus 2015. Ambition of more than 10% in 2025.

A-rating

CDP Climate and Water. Ranks no.1 Sustainalytics and Gold Class DJSI.

Sustainability is our core value. It is what makes us different from other companies and drives our business. We lead by example, so we look for opportunities to improve our environmental footprint and the footprint of our supply chain. We also work closely with customers to deliver goods and services that are better for people and/or the planet. Our portfolio of Brighter Living Solutions — products with benefit to society and/or the environment compared to mainstream solutions — now accounts for 62% of our net sales.

Our operating network spans more than 100 commercial production facilities in over 40 countries. The DSM Responsible Care Plan 2016-2020, an essential part of our company strategy, describes our environmental targets and what actions we are taking. Our approach supports the Sustainable Development Goals, especially SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). These align well with several topics from our materiality matrix, see 'Materiality' on page 26:

- Climate change & renewable energy
- Resource scarcity / Circular & bio-based economy
- Water security
- Biodiversity
- Product Stewardship

For more detailed information about our Planet performance, see 'Sustainability statements – Planet' on page 138. See also 'How DSM creates value for its stakeholders' on page 24 and 'Stakeholder Engagement' on page 139.

Climate change & renewable energy

	Aspiration	2017	2016
<i>Greenhouse gas (GHG)</i>			
GHG efficiency improvement cumulative versus 2008	40-45% in 2025	26%	23%
GHG emissions scope 1 + 2 market-based (million tons)		1.5	1.4
GHG emissions scope 1 + 2 location-based (million tons)		1.6	1.5
<i>Energy</i>			
Primary energy use (PJ)		23.6	22.6
Energy efficiency improvement cumulative versus 2015	> 10% in 2025	3%	2%
% Purchased electricity from renewable sources	50% in 2025	21%	8%

DSM is committed to addressing climate change by reducing the impact of our operations and our supply chain, enabling our customers to reduce their impact with solutions for a low-carbon economy, and advocating climate action.

We reduce our own greenhouse-gas (GHG) emissions by:

- sourcing more electricity from renewable sources; and
- improving the energy efficiency of our existing operations.

To encourage investments in low-carbon or carbon-free technologies we use an internal carbon price of € 50/t CO₂eq in the valuations of large investment projects.

DSM's climate change strategy received an A-rating from CDP in 2017 for the second year in a row. Still, we continue to search for improvements. We have reviewed our GHG emissions within the context of the Paris Agreement. Based on this review, we are defining new plans so that DSM continues to be a leader on the topic of climate change.

Scope 1 + 2 GHG emissions

Driven by our business growth, the scope 1 + 2 market-based GHG emissions increased from 1.4 to 1.5 million tons of CO₂eq in 2017. For definitions, see 'Explanations of some concepts and ratios' on page 240.

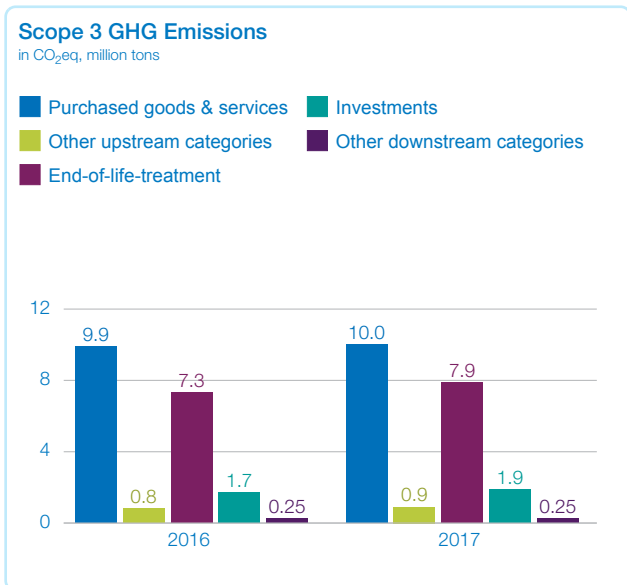
DSM's GHG efficiency improved further from 23% in 2016 to 26% in 2017 versus our 2008 baseline¹. Most of the efficiency improvement results are due to a greater use of electricity from renewable sources as well as the success of our energy efficiency program. Changes in GHG calculation methodologies can positively or negatively influence the reported performance. In 2017, part of the improvement can be explained by better insights into how to determine certain contributions to our GHG emissions.

Scope 3 GHG emissions

DSM's scope 3 emissions amounted to about 21 million tons of CO₂eq in 2017, which is around 1 million tons higher than 2016. This figure is based on calculations using global emission factors, estimates, extrapolations and assumptions.

The main scope 3 categories are purchased goods and services and end-of-life-treatment of sold products. For both categories the calculated emissions went up in line with the higher production volumes and associated spend. The investments category increased due to an exchange rate impact. At DSM, we try to sustainably reduce our carbon footprint across the value chain, for example, through the DSM Supplier Sustainability Program.

¹ For 2017, the GHG efficiency improvement is based on market-based emissions. For the period before 2017, market-based emissions were not measured, so the GHG efficiency improvement is based on location-based emissions.



We also develop products for the circular and bio-based economy to further reduce scope 3 emissions. See 'Stakeholder engagement – Suppliers' on page 140 and Resource scarcity / Circular & bio-based economy elsewhere in this chapter.

Avoided emissions

Most of the benefits of our Brighter Living Solutions with environmental benefits happen in the application or use phase. That means they contribute to avoided emissions downstream in the value chain.

For example, mooring ropes made with Dyneema® are approximately 80% lighter than traditional steel cables. They are also stronger and last longer. Their lighter weight makes mooring faster, leading to significant fuel and GHG emission savings over the seven-year lifetime of a rope. Roughly 4,900t CO₂eq are avoided when using a 100m-long mooring rope made with Dyneema®.

Our solutions for brewing beer reduce the energy required during the production process, saving money and reducing GHG emissions. Brewers Clarex® is a stabilization technology that eliminates the cold stabilization process, and our Brewers Compass® removes the need for consistently high-quality malt, replacing it with unmalted alternatives. In 2017, these two products contributed estimated avoided emissions of approximately 82,000t CO₂eq.

Energy transition

DSM's energy efficiency improvement is on track, increasing to 3% in 2017 versus our baseline 2015. The annual improvement was 0.6%, lower than our aspiration of 1% improvement per year. Our DSM Nutritional Products site in Jiangshan (China) impacted the overall result due to a product portfolio shift toward more energy intensive products and lower efficiency of the powerplant. Exceptionally, we ran the

site through the hot summer period at high production capacity to build up stock for a planned turnaround in 2018, which led to an increased use of energy.

In 2017, we continued our energy efficiency program to help reduce emissions and energy costs. The program has a dedicated annual investment budget to support those projects that have a longer payback period than typical business projects. In 2017, there were about 30 energy efficiency projects. Typical projects were LED lighting, steam trap improvements and better motor efficiency. These should deliver approximately 90TJ energy savings and 6,200t CO₂eq reduction per year. A more ambitious energy efficiency program was developed and approved for 2018.

Renewable energy

DSM is a member of the Climate Group's RE100 — leading companies that have committed to sourcing 100% of their electricity from renewable sources at the earliest possible opportunity. Our commitment is to source 50% of our electricity from renewable sources by 2025 and 100% at the earliest possible opportunity.

We are making excellent progress against our intermediate target. Purchased electricity from renewable sources increased from 8% in 2016 to 21% in 2017. Much of this progress is the result of DSM Nutritional Products' Swiss manufacturing sites, which source approximately 50% electricity from renewable sources as of 2017, and two new Power Purchase Agreements to participate in two wind parks, one in the US and one in the Netherlands. When fully constructed, the participation in the US will deliver an estimated 125 GWh of wind power to DSM. The Windpark Bouwdokken together with the earlier contracted Windpark Krammer will, once fully operational, deliver approximately 105 GWh. Additionally, we signed a contract which will bring the share of purchased electricity from renewable sources for the Netherlands to 100% in 2018.

We also look for opportunities to replace fossil fuels used in our own processes. The biomass plant at our DSM Nutritional Products site in Sisseln (Switzerland), which is currently under construction, is the first major success in this area so far. The project was initiated to avoid further investment in the life time extension of DNP's natural gas-fired cogeneration plant dating from the 1960s-1970s. To address this, a partnership has been developed with ENGIE and EWZ that will build, own, operate and maintain the biomass cogeneration plant.

Other emissions to air

	Aspiration	2017	2016
Air emissions efficiency improvement versus 2015	40% by 2020	41%	25%
<i>Air emissions (x 1,000 tons)</i>			
- VOC		6.6	8.9
- NO _x		0.7	0.8
- SO ₂		0.28	0.33

Our continuous improvements, especially at our manufacturing sites, helped to enhance our air emission efficiency by 21% in 2017 compared to 2016 and by 41% versus our baseline of 2015. Especially for our sites in China, reducing air emissions is a key topic. As a result, they delivered most of the reported improvement. Although we achieved the target set forth in our Responsible Care Plan 2015-2020, we initiated several new projects to move to closed systems that prevent emissions, and to install off-gas treatment systems in 2018 to further reduce VOC emissions.

“ Climate change is both a challenge and an incredible business opportunity. It's time to seize that opportunity — to create a new low-carbon economy and leave our children and grandchildren a healthy planet.”

Feike Sijbesma, CEO/Chairman Managing Board

Resource scarcity / Circular & bio-based economy

With the rapid growth of the world's population, the total demand for resources is expected to reach 130 billion tons by 2050 according to Accenture. That is more than 400% over-use of the earth's total capacity. At DSM, we are committed to securing the future availability of natural resources and unlocking more value from the limited resources we have.

The circular economy is one that is "restorative and regenerative by design, and aims to keep products,

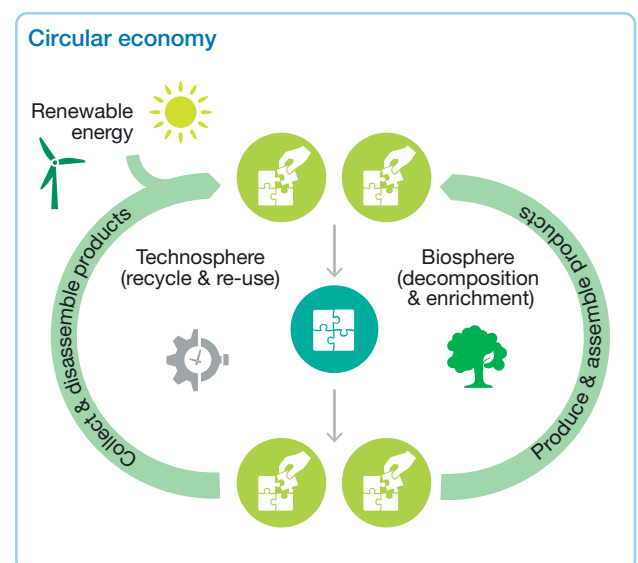
components, and materials at their highest utility and value at all times" (Ellen MacArthur Foundation) through the large-scale recovery and re-use of materials.

	Aspiration	2017	2016
<i>Renewable raw materials</i>			
Renewable raw materials		15.4%	16.5%
<i>Waste</i>			
Waste recycled	80-90% in 2020	84%	83%
Non-hazardous waste (kt)			
- Recovered		104	113
- Incineration ¹		12	11
- Landfill		20	18
Hazardous waste (kt)			
- Recovered		40	33
- Incineration ¹		23	22
- Landfill		3	1

¹ Includes incineration with and without heat recovery.

The bio-based economy is one that obtains its raw materials from nature (biomass) to produce materials, chemicals, energy and fuel.

For DSM, these concepts are mutually reinforcing and provide opportunities for increased productivity, improved sustainability and innovation. We adopt a multi-faceted value chain approach, and try to embed these concepts into our sourcing, operations, innovation and portfolio, and to advance 'closed-loop' solutions via partnerships.



We focus on exploring ways to:

- reduce the use of critical resources;
- replace scarce, hazardous, and potentially harmful resources;
- extend the lifetime of products;
- enable recycling and redesign with smart materials; and
- recover waste streams.

Renewable raw materials

Sustainable resources are essential to securing resource availability into the future and reducing GHGs by putting carbon back 'in the loop'. The renewable raw materials we use include waste from the agricultural industry, yeasts and enzymes, carbohydrates, and natural oils and acids. In 2017, the share of spend on renewable raw materials decreased to 15.4% versus 16.5% in 2016. This was despite an overall increase in the absolute amount. For more on sustainable biomass, see our position paper on the company website.

One of our applications for renewable raw materials is Decovery[®], our novel plant-based resin technology platform for high-performance paints, coatings and inks. This platform uses a variety of renewable building blocks such as sugars, starches, natural oils and materials from trees and agricultural waste that do not compete with the food chain to produce high-performance resins, typically comprising 30-50% bio-based content. Sigma Air Pure, a bio-based wall paint based on Decovery[®], also enhances the indoor air climate by reducing up to 70% of the formaldehyde in indoor air.

Waste

One aspect of enabling the circular economy involves reducing and recovering waste. DSM recycles as much as possible. Landfilling is our last resort.

Our definition of waste recycled is the percentage of total waste related to normal operations that is recycled or, if this is not possible, incinerated off site with heat recovery. In 2017, 84% of DSM's waste was recycled, which is 1% up compared to 2016. Maintaining the recycling performance was a challenge given the fact that we lost a large waste stream recovery outlet from DSM Nutritional Products' Dalry site (United Kingdom) for use in land restoration. The loss was compensated by various new recycling opportunities that have been successfully implemented.

For example, at DSM Nutritional Products in Mairinque (Brazil) we found an excellent opportunity to recover material. Extensive analysis proved that a certain waste stream, which until now had been landfilled, contains ideal nutrients for organic compost which can be used as plant fertilizer. We expect this to reduce our landfill by an estimated 900 tons per year.

Water security

Managing our water utilization in a sustainable way is an important part of DSM's daily operations. We have supported the UN CEO Water Mandate since 2011. In 2017, we received an A-rating from CDP for our water governance and management strategy.

	Aspiration	2017	2016
<i>Sustainable water management</i>			
- Water risk assessments completed	90% in 2020	100%	67%
- Water risk assessment mitigating actions		in progress	
- Water consumption (million m ³)		23	22
- Water use (million m ³)		114	104
<i>Emissions to water</i>			
- COD (kt)		2.5	2.4

We believe that water risks are local by nature, so we focus on local water risk assessments and thorough follow-up. In 2017, we updated our water risk assessment methodology to the latest standards. We incorporated the screening for water stress using 'WRI Aqueduct' and 'WWF-DEG Water Risk Filter' to determine which DSM sites are in areas of water stress and carried out the new updated water risk assessment at all relevant sites. The main identified water risks are related to water quality, changing local regulations and limitations in local infrastructure. The risk exposure to water scarcity has been found as very limited in the regions where we operate. Mitigation actions are currently being defined and will be followed up in the coming period 2018-2020.

"Water security continues to be a concern for the world's growing population, with many areas already under stress of scarcity or pollution, or areas that suffer damage from natural disasters. We treat water security as a material topic with a management approach that focuses on water at the local level. Via this report, we report our progress on water security toward the UN Global Compact CEO Water Mandate."

Feike Sijbesma, CEO/Chairman Managing Board

To strengthen our water management in the coming years, a new corporate water management standard was defined in line with the Alliance for Water Stewardship standard and the UN Global Compact CEO Water Mandate. This will be rolled out at our sites in water-stressed areas and other selected facilities.

Compared to 2016, water consumption increased to 23 million m³. The increase was driven by higher production volumes at various manufacturing sites.

DSM's water pollution reduction programs aim to reduce total water pollution, mainly through reductions in Chemical Oxygen Demand (COD). Total COD increased slightly from 2.4kt in 2016 to 2.5kt in 2017. Waste water treatment improvement projects executed at the DSM Nutritional Products sites in Grenzach (Germany) and Sisseln (Switzerland) successfully lowered their COD emissions. However, various manufacturing sites reported higher COD emissions due to higher production volumes that offset the achieved improvements.

Biodiversity

	2017	2016
Sites near high biodiversity	61%	60%

We identify and monitor protected areas near our sites and our impact on them. Sixty-one percent of our sites have been identified as being located in, or adjacent to, areas of high biodiversity value. In all cases, the relevant production sites operate within applicable limits as defined by local authorities. See also 'Stakeholder engagement' on page 139 and DSM's position paper on Biodiversity on the company website.

Product Stewardship

An important pillar within our sustainability and SHE strategy is Product Stewardship. This is defined as the responsibility to control and minimize all possible safety risks and adverse effects on human or animal health and on the environment that could be caused by (the substances present in) our products throughout the value chain.

DSM's Global Product Stewardship Network continues to develop our position regarding Substances of (Very) High Concern. We strive to phase out these compounds from our portfolio. This excludes substances that are defined as 'essential to life' (in small quantities) and therefore cannot yet be substituted. We also recognize that certain ingredients are required for functionalities for which no feasible alternatives are currently available. In all cases, we ensure that scientific and risk-based controls are in place.

Our coating resin NeoPac™ PU-580 is an example of how DSM addresses Product Stewardship. The quality of air in a freshly painted room is affected by components that are emitted from paints. DSM Resins & Functional Materials developed a breakthrough technology to replace one of the toxic substances in paints and coatings. The original substance is volatile and leads to health problems if it comes into contact with skin or the respiratory system. The market has long needed a replacement, but the search always failed due to the inadequate performance of available alternatives. Based on a novel mechanism, DSM developed a next-generation binder which meets all the requirements for labeling, volatile organic compounds, and indoor air quality without compromising on performance. This development was commercialized as NeoPac™ PU-580 early in 2017.

Profit

Delivering profitable growth

+15% 

Adjusted EBITDA growth versus 2016, to € 1,445 million

+190 

ROCE growth (in bps) versus 2016, to 12.3%

+9%

Organic sales growth up from 2016

21%

Higher-margin innovation sales, meeting our 20% ambition

44%

Sales to high-growth economies, providing a well-balanced geographical spread in line with our aspiration

€ 546

Capital expenditure (cash-based), up from € 475 (in millions)

€ 2 billion

Proceeds from the sale of Patheon over recent years

€ 1,781

Total net profit including gain on Patheon disposal of € 1,250 up from € 629 (in millions)

€ 1.85

Proposed dividend per ordinary share for 2017¹, up from € 1.75 for 2016

¹Subject to approval by the Annual General Meeting of Shareholders.

Overall financial results

Within the Profit dimension of DSM's Triple P approach, DSM aims to deliver a sustainable financial return. This ensures business continuity and allows the company to grow, while at the same time providing shareholders the opportunity to invest in a company whose purpose drives sustainable above-market growth at higher returns.

We established and implemented our three-year strategic plan for the period 2016-2018 called Strategy 2018: *Driving Profitable Growth* with two headline financial targets: high single-digit percentage annual Adjusted EBITDA² growth and high double-digit basis point annual ROCE growth. To deliver on these targets, we defined clear actions, including outpacing market growth, cost reduction and efficiency improvements to deliver € 250-300 million in cost savings versus the 2014 baseline, and making a continuous push for consistent improvements in capital efficiency.

In support of our targets, we also adjusted our global organizational and operating model to create a more agile, commercially focused and cost-efficient company. We refrained from large acquisitions and focused instead on delivering value from the current portfolio and extracting value from the monetization of our joint venture partnerships.

This chapter includes an overview of the key financial metrics of the company and our performance in 2017.

In 2017, DSM delivered strong financial results again as we significantly exceeded our financial targets. Our focus on driving above-market sales growth, while relentlessly pursuing cost and efficiency improvement initiatives as well as maintaining capital discipline, continued to deliver strong results in both Nutrition and Materials.

DSM reported net sales of € 8,632 million, an increase of 9% versus 2016. Group organic sales growth was 9%, mainly driven by a strong volume growth of 7%, clearly above market. All businesses, both in Nutrition and Materials, contributed well to this growth. Prices were overall slightly up, partly offset by somewhat weaker currencies.

Adjusted EBITDA grew by an impressive 15% to € 1,445 million, far ahead of the high single-digit growth target we originally set with Strategy 2018. Strong EBITDA growth in the business was also supported by our cost-reduction and efficiency improvement programs, which progressed as planned and are on track to deliver the targeted benefits. DSM achieved run-rate cumulative gross cost savings of about € 195 million by the end of 2017. In the first two years of Strategy 2018, we have increased our Adjusted EBITDA by €

370 million or 34%. Overall Adjusted EBITDA margin for 2017 was 16.7%, an increase of 80 basis points versus the 15.9% of 2016.

Income statement

x € million	2017	2016	Change
Net sales	8,632	7,920	9%
Adjusted EBITDA	1,445	1,262	15%
EBITDA	1,348	1,146	18%
Adjusted operating profit	957	791	21%
Operating profit	846	657	29%
Adjusted net profit	706	520	36%
APM adjustments	1,075	109	
Net profit	1,781	629	183%
Net profit attributable to equity holders of Koninklijke DSM N.V.	1,769	621	185%
ROCE (in %)	12.3	10.4	
Adjusted EBITDA margin, (in %)	16.7	15.9	

Return on Capital Employed (ROCE) was also well ahead of target, up 190 basis points to 12.3% in 2017 versus 10.4% in 2016. Since the kick-off of our successful Strategy 2018, ROCE is up 470 basis points versus end of 2015.

Capital efficiency is a key driver of cash generation. One of our key focus areas continued to be the improvement in our working capital as percentage of total sales. At the end of 2017, total working capital was 17.2%, compared to 18.4% end of 2016 and clearly better than our aspiration of 'below 20%'.

Innovation plays an important role in driving both top-line and bottom-line growth. With 21% innovation sales in 2017, which we define as sales from products and solutions introduced in the last five years, we are delivering against our ambitious aspiration of 20%. In 2017, DSM also made progress on promising innovation projects that could have a wider societal impact and drive future growth. These include the Clean Cow project, the Green Ocean partnership (now called Veramaris), Stevia and Niaga®.

² In presenting and discussing DSM's financial position, operating results and cashflows, 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 165.

During 2017, we strengthened our portfolio through smaller acquisitions, including Twilmij (Dutch feed premix company), UP4® brand (probiotics for consumer health), Inner Mongolia Rainbow Biotechnology (majority stake in hydrocolloid solutions for human nutrition), BioCare (probiotics for consumer health), Sunshine (solar photovoltaic backsheet technology) and Amyris' production facility in Brazil (for bio-based farnesene). Furthermore, DSM made an equity investment in Amyris, Inc. (USA) and entered into a development arrangement for bio-based nutritional ingredients.

During the year, DSM also extracted significant value with the sale of the remaining stake in Patheon to Thermo Fisher Scientific Inc., bringing the total cash proceeds from the exit from our former pharma custom manufacturing activities to approximately €2 billion over the years. The remaining two partnerships, DSM Sinochem Pharmaceuticals and ChemicalInvest, both showed solid results in 2017.

Net sales and Adjusted EBITDA

At €8,632 million, net sales in 2017 were 9% higher than in 2016 (€7,920 million). Organic growth was 9%, driven by both Nutrition and Materials. Volume development accounted for a 7% increase, while price/mix had a 2% positive effect on

growth compared to 2016. Exchange rate fluctuations had a negative impact of 1%, balancing out a 1% positive effect from acquisitions and consolidations.

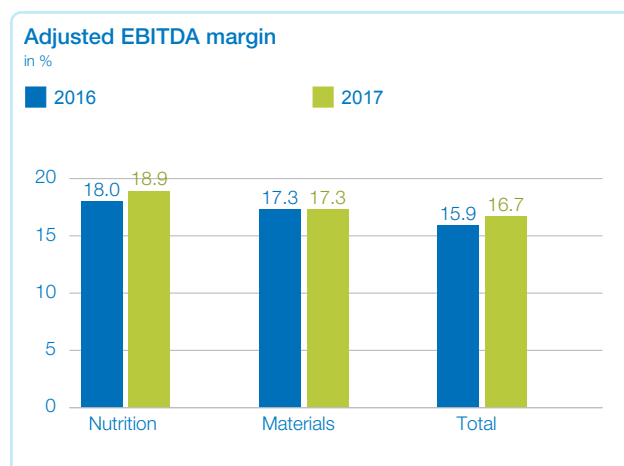
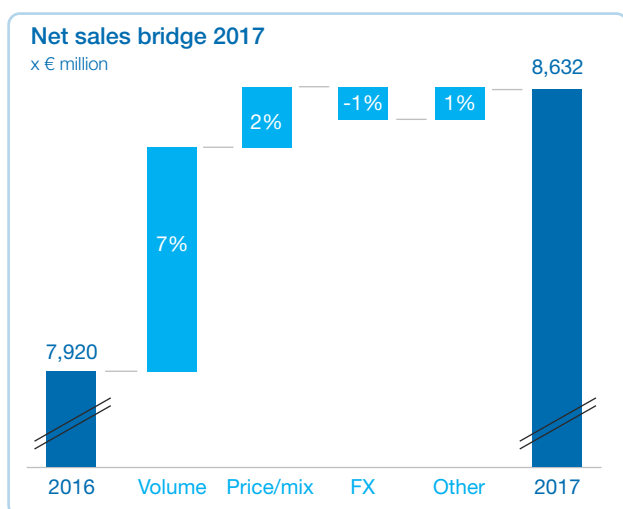
Sales growth was strong among all regions, with favorable high-single digit growth in Western Europe as well as in North and Latin America. We performed well in Brazil, despite the disruption caused by the meat scandal that impacted the market for beef and poultry exports, and against a backdrop of economic uncertainty.

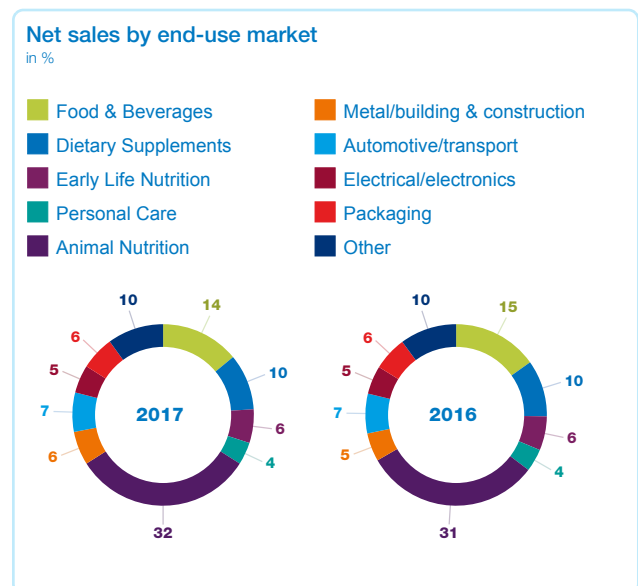
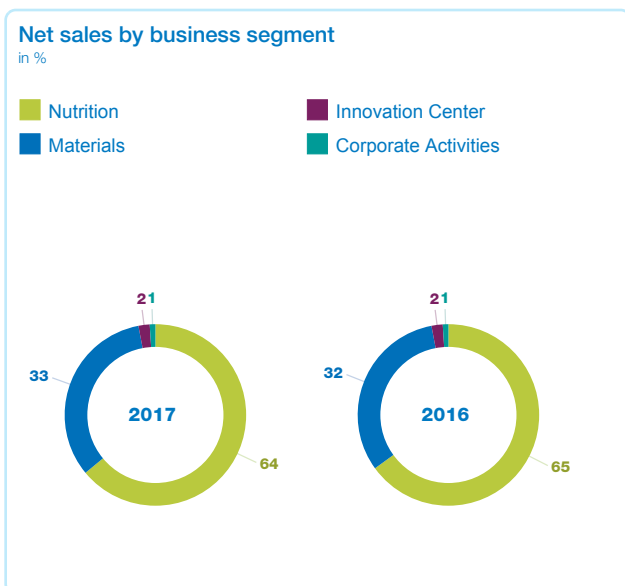
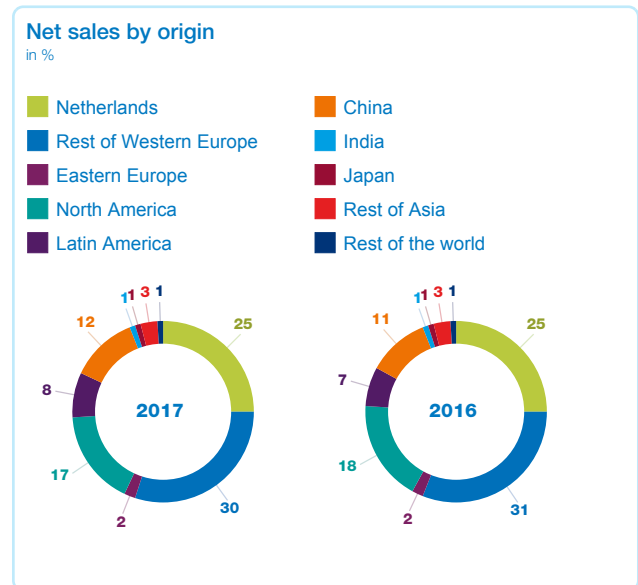
Double-digit sales growth was achieved in China, India and Eastern Europe. All high-growth economies together currently represent 44% of DSM's sales (45% when Africa is included), which is in line with 2016. The share of sales in these economies as a proportion of DSM's total sales gives us a well-balanced global footprint.

Adjusted EBITDA (Adjusted operating profit before depreciation and amortization) increased by 15% or €183 million, from €1,262 million in 2016 to €1,445 million in 2017.

Adjusted EBIT (Adjusted operating profit) rose from €791 million in 2016 to €957 million in 2017, up 21%.

x € million	Net sales			Adjusted EBITDA		
	2017	2016	% change	2017	2016	% change
DSM	8,632	7,920	9%	1,445	1,262	15%
Nutrition	5,579	5,169	8%	1,053	931	13%
Materials	2,825	2,513	12%	488	435	12%
Innovation Center	169	167	1%	9	1	
Corporate Activities	59	71		(105)	(105)	





Net profit

Net profit attributable to equity holders of DSM increased by € 1,148 million to € 1,769 million. This increase was mainly a result of the higher Adjusted EBITDA (up € 183 million) and the sale of DSM's share in Patheon (€ 1,250 million) and other differences in APM adjustments (-€ 175 million), see below. Expressed per ordinary share, net earnings amounted to € 10.07 in 2017 (2016: € 3.52).

Financial income and expense decreased by € 29 million year over year to € 104 million mainly caused by higher results on derivatives and on other participating interests.

The reported effective tax rate over Adjusted taxable result 2017 was 16.8% (2016: 18.3%). This decrease was mainly caused by a one-time benefit from the US tax reform.

Adjustments made in arriving at DSM's Alternative performance measures (APM adjustments)

Total APM adjustments for the full year amounted to a profit of € 1,075 million, consisting of a profit regarding associates and joint ventures of € 1,158 million (mainly due to the gain of € 1,250 million on the sale of the shares of Patheon N.V. and impairments at associated companies of € 95 million), offset by € 60 million in restructuring costs related to the ongoing cost-reduction programs, € 26 million relating to demolition, site closure and relocation cost, € 14 million of impairments and € 11 million of acquisition/divestment-related and other costs, with a tax benefit of € 28 million.

Cash flow statement

x € million	2017	2016
Cash and cash equivalents at 1 January	604	665
Cash flow provided by operating activities	996	1,018
Cash from / (used in) investing activities	689	(1,194)
Cash from / (used in) financing activities	(1,344)	113
Effect of exchange differences	(46)	2
Cash and cash equivalents at 31 December	899	604

Cash flow provided by operating activities consists of the EBITDA for the year (€ 1,348 million) less various cash-out items including income tax of € 66 million and defined benefit plans of € 61 million, and changes in working capital of € 237 million. Our focus on cash flow resulted in a full-year operating cash flow of € 996 million, which is slightly below the comparative period in 2016, fully due to operating working capital (OWC) development as a result of higher net sales. See also 'Consolidated financial statements' on page 151.

The cash from investing activities included the sale of the shares of Patheon N.V. (€ 1,535 million), partly offset by capital expenditures (€ 547 million) and various acquisitions (€ 242 million).

The cash used in financing activities consisted mainly of the repayment of long-term loans (€ 818 million), dividend paid (€ 200 million), interest paid (€ 135 million) and repurchase of shares (€ 297 million).

For the full cash flow statement, see 'Consolidated cash flow statement' (Note 26) on page 162.

Balance sheet

The balance sheet total (total assets) reached € 12.8 billion at year-end (2016: € 13.0 billion). Equity increased by € 885 million compared to the position at the end of 2016. This increase was mainly due to the result on the sale of the shares of Patheon N.V. of € 1,250 million, offset mainly by net foreign exchange differences of € 637 million. Equity as a percentage of total assets increased from 48% to 55%.

Compared to year-end 2016, net debt decreased by € 1,328 million to € 742 million. The gearing at year-end was 10%, a significant decrease compared to 25% at year-end 2016.

Capital expenditure on intangible assets and property, plant and equipment amounted to € 586 million in 2017 (€ 546 million on a cash basis), which was 17% higher than the level of amortization and depreciation in support of the high organic growth.

Total working capital amounted to € 1,499 million compared to € 1,481 million at year-end 2016, which represents 17.2% as a percentage of annualized fourth quarter 2017 sales (2016: 18.4%), comfortably below our aspiration of 20%. Cash-wise, the OWC increased by € 195 million related to organic growth. In absolute terms OWC was stable in 2017, as the increase of OWC related to organic growth (9%) was largely compensated by the weakening of mainly USD and CHF. The OWC percentage improved from 23.9% at year-end 2016 to 22.3% of annualized sales at year-end 2017.

Cash and cash equivalents came to € 899 million at the end of the year; including current investments, this came to € 1,853 million (2016: € 1,548 million). Next to the regular cash flow, this increase was mainly attributable to the sale of the shares of Patheon N.V. (€ 1,535 million), partly offset by the repayment of long-term loans (€ 818 million) and the various acquisitions (€ 242 million).

Balance sheet profile

	2017		2016	
	x € million	in %	x € million	in %
Intangible assets	3,058	24	3,188	24
Property, plant and equipment	3,313	26	3,325	26
Other non-current assets	999	8	1,404	11
Cash and cash equivalents	899	7	604	5
Other current assets	4,533	35	4,437	34
Total assets	12,802	100	12,958	100
Equity	7,065	55	6,180	48
Provisions	204	2	182	1
Other non-current liabilities	3,358	26	3,492	27
Other current liabilities	2,175	17	3,104	24
Total equity and liabilities	12,802	100	12,958	100

“ It is great to see how much impact our growth initiatives, as well as our cost-saving and efficiency improvement programs, have had since 2015. In 2018 we'll focus on anchoring the new organization and delivering the full benefits.”

Geraldine Matchett, CFO

Outlook 2018

DSM expects to deliver full-year 2018 results above the targets set in Strategy 2018, with an Adjusted EBITDA growth somewhat up from high single-digit to double-digit and a ROCE growth above 100 basis points. The expected substantial negative foreign exchange effects, based on current rates, will be more than offset by a positive pricing environment in Nutrition, part of which is temporary in nature and expected to be heavily weighted towards the first half of the year.

Key business figures at a glance

DSM's activities are grouped in three clusters: Nutrition, Materials and Innovation Center. We report separately on Corporate Activities. Results presented in this section (and elsewhere in this Report) relate to consolidated activities only (therefore non-consolidated partnerships are excluded).

Net sales

x € million	2017	2016
Nutrition	5,579	5,169
Materials	2,825	2,513
Innovation Center	169	167
Corporate Activities	59	71
Total	8,632	7,920

Adjusted operating profit (EBIT)

x € million	2017	2016
Nutrition	770	645
Materials	361	311
Innovation Center	(30)	(24)
Corporate Activities	(144)	(141)
Total	957	791

Adjusted EBITDA

x € million	2017	2016
Nutrition	1,053	931
Materials	488	435
Innovation Center	9	1
Corporate Activities	(105)	(105)
Total	1,445	1,262

Capital employed at 31 December

x € million	2017	2016
Nutrition	5,420	5,537
Materials	1,786	1,807
Innovation Center	562	576
Corporate Activities	(2)	(31)
Total	7,766	7,889

Adjusted EBITDA margin

in %	2017	2016
Nutrition	18.9	18.0
Materials	17.3	17.3
Total	16.7	15.9

ROCE

in %	2017	2016
Nutrition	14.1	12.0
Materials	20.0	17.6
Total	12.3	10.4

Capital expenditure

x € million	2017	2016
Nutrition	407	331
Materials	124	106
Innovation Center	43	32
Corporate Activities	12	16
Total, accounting based	586	485
Non-cash items	(39)	(9)
Customer funding	(1)	(1)
Total, cash based	546	475

R&D expenditure (including associated IP expenditure)

	x € million		as % of net sales	
	2017	2016	2017	2016
Nutrition	219	205	3.9	4.0
Materials	130	124	4.6	4.9
Innovation Center	75	75	44.4	44.9
Corporate Activities	20	22	33.9	31.0
Total	444	426	5.1	5.4

Workforce at 31 December

headcount	2017	2016
Nutrition	13,676	13,260
Materials	4,635	4,460
Innovation Center	685	619
Corporate Activities	2,058	2,447
Total	21,054	20,786





@h.sobue

It was delicious #ramennoodle2017
Japan

Eggs are an excellent source of nutrition because they are packed with protein and vitamins. DSM helps farmers around the world produce high-quality eggs in a more sustainable way thanks to our nutritional expertise and range of vitamins, carotenoids, enzymes and eubiotics. Healthy hens produce eggs with a strong shell, an attractive yolk and higher nutrient content.

3 GOOD HEALTH
AND WELL-BEING





@FollowTheLita

No more “so-called” energy products for me! @Culturelle Pro-Well® gives me sustained energy & is packed with vitamins! New York | Los Angeles, USA

Culturelle® from DSM's i-Health brand of probiotics became the bestselling probiotic supplement in the US in 2016 and, in 2017, the number one in the world. An example of the way DSM is increasingly close to consumers, Culturelle® supports gut health, a healthy immune system and energy¹. We want people to feel their best and have a healthy lifestyle.



¹ These statements have not been evaluated by the US Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.









@snreisewelt

#australia2017 #beach #travel
Cape Le Grand National Park,
Australia

Roughly two-thirds of Australians will be diagnosed with skin cancer by the time they are 70 and about half of all Americans will develop it by the age of 65. DSM offers the broadest range of UV filters in the world and we're promoting sun protection to help people stay healthy.

3 GOOD HEALTH
AND WELL-BEING





@thewholefooddiary

Countryside bound with an oatmilk decaf cappuccino in my @keepcup and a treat ham and gruyere croissant for Clayton Clapham Junction, UK

People want to be healthy and they want to enjoy what they eat. At DSM, we offer a range of solutions for better nutrition. For example, DSM's new PreventASe® helps stop the formation of acrylamide in foods like bread. When bread is baked at high temperatures acrylamide can form. Acrylamide is a known carcinogen.





Nutrition

Everyone wants to be healthy

#1

DSM is the world's largest supplier of vitamins, carotenoids, nutritional lipids, enzymes and other nutritional ingredients. We supply enough Quali®-A (vitamin A) to deliver the sufficient daily dose to more than 750 million people. Antioxidants like vitamin A are vital to good health and longevity. They benefit eye health, boost immunity and foster cell growth.

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



€ 5,579

Net sales (in millions)
up from € 5,169
in 2016

+8%

Organic sales growth
up from 2016

18.9%

Adjusted EBITDA
margin up from 18.0%
in 2016

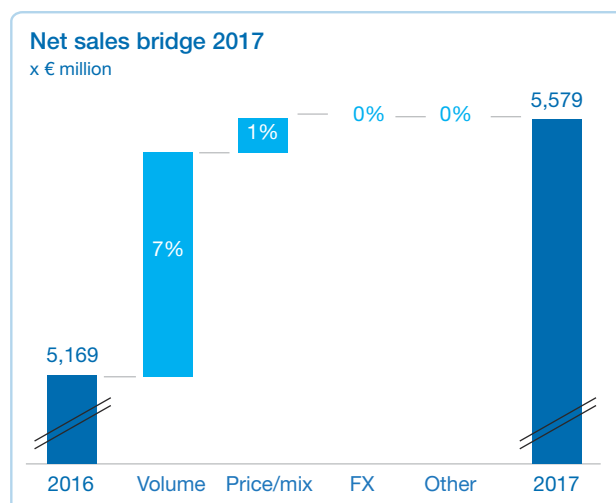
x € million	2017	2016
Net sales:		
DSM Nutritional Products:		
- Animal Nutrition & Health	2,660	2,399
- Human Nutrition & Health	1,939	1,823
- Personal Care & Aroma		
Ingredients	353	337
- Other ¹	86	74
	5,038	4,633
DSM Food Specialties	541	536
Total	5,579	5,169
Organic sales growth (in %)	8	5
Adjusted EBITDA	1,053	931
Adjusted operating profit	770	645
Capital expenditure	407	331
Capital employed at 31		
December	5,420	5,537
ROCE (in %)	14.1	12.0
Adjusted EBITDA margin (in %)	18.9	18.0
R&D expenditure	219	205
Workforce at 31 December		
(headcount)	13,676	13,260

¹ Other covers pharma and custom manufacturing & services activities.

Business

DSM Nutritional Products and DSM Food Specialties form our Nutrition cluster. This cluster provides solutions for animal feed, food and beverages, pharmaceuticals, infant nutrition, dietary supplements and personal care. DSM is 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. Our unique portfolio of products and services is global and highly diversified, serving customers and other stakeholders across various end-markets around the world. More information is available in the DSM Factbook on the company website.

Nutrition cluster performance



Nutrition is outperforming the aspirations outlined in Strategy 2018. The business continued strong momentum, clearly delivering above-market growth with an increasingly higher-value portfolio of feed and food solutions. The nutrition improvement programs, covering cost reductions, operational and sales excellence, continued to underpin ongoing progress.

Full year 2017 sales increased by 8% organically when compared to 2016, led by volumes up 7% and prices up 1%. The successful implementation of the growth initiatives continued to drive organic growth, both in Animal Nutrition and Human Nutrition, clearly outpacing market growth.

Full year 2017 Adjusted EBITDA was € 1,053 million, up 13% driven by organic sales growth in combination with the impact of the cost-saving and efficiency improvement programs. This increase in Adjusted EBITDA equals the very strong 2016, when Adjusted EBITDA also grew by 13%. The Adjusted EBITDA margin of 18.9% further improved in 2017 compared with 18.0% in 2016.

Trends

Pressure on our food systems is increasing because of population growth, climate change, resource scarcity, government policies and rising political tensions. DSM is committed to delivering nutritional solutions that help keep both people and planet healthy.

Urbanization and higher living standards continue to drive demand for food that is fresh, convenient, healthy, perceived as more natural, and sourced in an ethical and sustainable way. Of course, it also has to be safe. As people have more disposable income, they look for healthier options, including food with less added sugar and salt. Generally, the growing middle classes are also eating more meat (i.e. animal protein).

DSM works with customers and other stakeholders to deliver more sustainable solutions that have less impact on the environment, especially in Animal Nutrition & Health. For example, our enzymes help animals improve digestion and extract more nutritional value from feed. That way, they still grow well even when they eat less. As a result, fewer natural resources, such as land and water, are needed for protein production.

People around the world are also living longer because of rising incomes and higher living standards. Aging people have different nutritional needs than children and other adults. DSM can offer tailored solutions to support health and well-being at every stage of life thanks to our expertise in food fortification and dietary supplementation.

Despite higher living standards around the world and a growing focus on health, there are still many people who do not have access to the food and nutrients they need to live to their full potential. About 800 million people go hungry and two billion are malnourished. Climate change and geopolitical tensions that lead to more refugees and migrants are exacerbating the problem. DSM is committed to ending hunger and malnutrition. Through our Nutrition Improvement Program (NIP), we support better nutrition for some of the world's most vulnerable people, especially mothers and children in places like Africa, India and areas of southern Asia. Science shows that good nutrition during the first 1,000 days of life — from conception to a child's second birthday — is critical for growth and development. Inadequate nutrition at this stage has irreversible negative consequences that can last a lifetime, including reduced cognitive ability. Women of child-bearing age, as well as pregnant and lactating mothers, need special support. Fortified foods and supplements can play a valuable role where available diets are inadequate.

In India, approximately 470 million people suffer from malnutrition. DSM's Project MANDI (Making A Nutrition Difference to India) aims to build a socio-commercial business model that will be able to deliver innovative local product solutions including fortified food and staple products, especially rice, as well as vitamin and mineral supplements. The model also aims to facilitate community education to help solve the issue of malnutrition in India, especially for children and pregnant women.

Sustainability & Innovation

Sustainability is one of the key drivers of DSM's Nutrition cluster. Our nutrition businesses support many of the UN Sustainable Development Goals (SDGs), especially SDGs 2, 3, 12 and 13.

At DSM, we are proud of our strategic partnership with the UN World Food Programme (WFP). We help improve the nutritional content of the food distributed by WFP. Together

with WFP, we also raise awareness of the importance of nutrition, particularly micronutrients, both for individual health as well as the foundation for a healthy, economically successful society. Today, DSM reaches more than 30 million people each year with improved nutrition through the partnership. DSM also partners with the UN Children's Fund (UNICEF) and other organizations around the world to directly address malnutrition.

In addition to our work on hunger, malnutrition, health and well-being, DSM's innovations are increasingly focused on improved sustainability throughout the product lifecycle and the value it brings to customers and society at large. For example, in 2017 we continued our work on Project Clean Cow to develop a feed solution that helps reduce methane emissions from cows. Methane is a very potent greenhouse gas that contributes to climate change. Ruminants, such as cows, are responsible for ~27% of anthropogenic methane emissions globally. We also made progress on more plant-based solutions, including Project Green Ocean (see 'Animal Nutrition & Health' on page 71) and alternatives to animal protein such as CanolaPRO™ (see 'DSM Business Incubator' on page 94).

Governments around the world are increasingly focused on the environmental footprint of domestic industry. In recent years, China in particular stepped up enforcement of its environmental regulations, also known as the government's 'Blue Skies' policy. This policy addresses air, soil and water pollution and sets significantly higher standards, including higher standards for the many small and medium-sized vitamin manufacturers. The result is a more level playing field for these manufacturers versus Western competitors. DSM has been a very reliable player in the market and able to support customers through this era of uncertainty, while at the same time being a frontrunner in compliance.

Strategy

The Nutrition cluster has unparalleled access to customers thanks to our global footprint and our ability to customize formulations for local markets. The cluster is active in more than 60 countries. Our strategy accelerates growth by focusing on four key areas:

- Expanding our core
- Adding new products and solutions
- Expanding in new segments and regions
- New business models

We have been expanding our core by adding new premix facilities to our global network, including a new animal premix facility in China as well as the acquisition of Twilmij B.V., a nutritional feed solution provider in the Netherlands. The acquisition of BioCare Copenhagen A/S (Denmark) in December further expanded our offering in human gut health

ingredients with probiotics, an attractive market segment in nutritional ingredients.

Another example of our strategy in action is the new products and solutions we will develop through our cooperation with Amyris, involving vitamins and other nutritional ingredients. DSM made an equity investment in Amyris, Inc. in the US in mid-2017. At the end of the year, we also acquired Amyris' production facility in Brazil and intellectual property related to farnesene, a bio-based key intermediate for many applications for food, feed and personal care.

Expanding into new segments and regions is also a key part of the nutrition strategy. DSM's investment in hydrocolloids with the acquisition of a majority equity stake in Inner Mongolia Rainbow Biotechnology Co., Ltd. is one such example.

Our fourth growth area, new business models, mainly represents our drive to move further down the value chain, closer to consumers and farmers. In 2017, we stepped up the expansion of our branded, direct-to-consumer dietary supplement business (i-Health) into the Asian market, especially in China. Also in China, we significantly broadened our branded, direct-to-farmer feed solutions, a strategy that has provided us with extensive access to the relatively fragmented local farming community.

In 2017, we reorganized some parts of our nutrition business, namely Human Nutrition & Health, by market segment (e.g. dietary supplements, food & beverage, early-life nutrition, NIP). In addition to the regional geographic focus, these global market segments have been designed to drive even greater customer intimacy and growth, while at the same time providing insights to key innovation needs for the future.

As we pursue opportunities across the Nutrition cluster, DSM takes a balanced view. We consider potential risks to our business and make an effort to mitigate these, including long-term changes in food preferences and food systems, demand for dietary supplements, commoditization of nutritional ingredients, the spread of infectious diseases in animals, and the effects of geopolitical and macroeconomic developments. For more information on how DSM manages risks, see 'Risk management' on page 112.

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 had total sales of € 5,038 million in 2017, a 9% increase compared to the € 4,633 million in 2016.

Animal Nutrition & Health

Highlights 2017

- Strong organic growth
- New facility within the China network
- Acquisition of Twilmij B.V. in the Netherlands
- Strengthened organization of the global commercial headquarters
- Strong progress on innovation projects

The Animal Nutrition & Health business achieved sales of € 2,660 million in 2017 versus € 2,399 million in 2016. Sales were exceptionally strong, with 11% organic growth, driven by 9% higher volumes, albeit against an easy comparative base. The business continued to benefit from its strategy to address a wide range of species, as well as from its diversified geographical presence, covering all the major growth areas in the world, and its strong forward-integrated premix position. Markets in animal feed were favorable and supportive in 2017, except for Latin America, where weak economic conditions impacted domestic demand. Prices were 2% above 2016, owing to higher premix and vitamin prices.

DSM Animal Nutrition & Health serves the global feed industry with innovative and sustainable nutritional solutions. A pioneer since the earliest days of feed additives, we draw on the latest science to provide a unique portfolio that runs from vitamins through carotenoids to cutting-edge eubiotics and feed enzymes.

Growing population and growing incomes are driving demand for animal protein. Our products help producers of animal feed and meat, including farmers, raise animals more efficiently and sustainably. Products that boost efficiency are supporting DSM's organic growth, while solutions for more sustainable production present new business opportunities now and in the future.

Greater interest in where food comes from and how it is produced is driving some of this change. For example, concerns about antimicrobial resistance are leading to consumer and regulatory pressure to reduce antibiotic use in animal nutrition. DSM anticipated this development and has worked over the last ten years to position our broad and proven portfolio of eubiotics as the solution. In 2017, we stepped up our gut health strategy for antibiotic-free animal production and rolled it out globally. As a result, sales of eubiotics for gastrointestinal functionality grew by 20% versus 2016. CRINA® Poultry Plus performed particularly well. This patented formulation of benzoic acid and essential oils is an innovative eubiotic solution for broiler chickens.

In 2017, the core portfolio also had strong growth with the reinforcement of our Hy-D® positioning in the vitamin D segment. Used worldwide, Hy-D® is a vitamin D3 metabolite that specifically supports bone development, muscle formation and immune response in poultry and swine.

In China, we continued to expand our core with the growth of premix solutions. This year in Shandong, we opened our sixth Chinese premix facility. The country is the largest feed producer in the world and one of the most dynamic markets for Animal Nutrition & Health. Over the last five years our business in China grew by double digits. Food consumption trends remain strong and continue to be led by coastal cities. However, the densely populated inland regions increasingly present opportunities thanks in part to the development of e-commerce including Alibaba, an important sales channel for our business. Our growth in China is bolstered by our ability to reliably access, supply and support a relatively fragmented market through our direct-to-farmer business model.



Opening of the Shandong premix facility in China in September.

In Europe, we also expanded our core business with the acquisition of Twilmij B.V., a Dutch nutritional solutions company in the animal feed sector. Twilmij's geographic location in the Netherlands strengthens our foothold in Northwest-European markets, bringing us closer to customers and allowing better service levels.

In Latin America, domestic demand was impacted by weak economic conditions and then exacerbated by a meat scandal in Brazil that was unrelated to DSM. Beef and poultry exports were impacted but both recovered quickly in the third quarter, leading to a strong overall performance in the second half of the year.

In 2017, the organization of the global headquarters of Animal Nutrition & Health was strengthened. This included reinforcing marketing and sales capabilities that will further support our growth strategy.

DSM's innovation pipeline is broadening our portfolio of radical breakthroughs for more sustainable production of animal protein. Project Clean Cow is an excellent example. Trials show a greater than 30% reduction in methane emissions from cows fed with our new feed solution. Clean Cow is scheduled to launch after 2019.

Another example is Project Green Ocean, now branded as Veramaris. Veramaris is a joint venture of DSM and Evonik to produce omega-3 fatty acids from natural algae for animal nutrition in the aquaculture and pet food segments. This Brighter Living Solution is a breakthrough innovation that will enable cost-effective production of omega-3 fatty acids (DHA and EPA) without using fish oil from wild caught fish, a finite resource. Together, DSM and Evonik are investing USD 200 million in a manufacturing facility, which is under construction in Blair (Nebraska, USA) and scheduled to open in 2019.

Human Nutrition & Health

Highlights 2017

- Organic growth from business-to-business and direct-to-consumer solutions
- Culturelle® becomes world's top branded probiotic supplement
- Active Pharmaceutical Ingredient applications gain momentum
- Africa Improved Foods plant opening
- Acquisition of BioCare Copenhagen A/S in Denmark

Human Nutrition & Health had sales of € 1,939 million in 2017 versus € 1,823 million in 2016, led by 7% organic growth. After a significant step-up in organic growth in 2016, the business maintained its positive momentum with 6% volume growth and a slightly positive price development, despite ongoing softness in some of its end-market segments. The growth initiatives embarked on under Strategy 2018 resulted in this above-market growth.

Human Nutrition & Health provides solutions for the food & beverage, dietary supplements, early-life nutrition, medical nutrition and Active Pharmaceutical Ingredients (API) markets. We serve these industries with vitamins, nutritional lipids, carotenoids, nutraceuticals and custom nutrient premixes.

Our ability to deliver at a global scale while fostering local customer intimacy continues to support above-market growth. In fact, Human Nutrition & Health had strong organic growth of 7% in 2017 with all reporting units and strategic customer segments showing strong performance. By strengthening our innovation pipeline in each market segment, we are positioning ourselves for continued above-market growth opportunities in the near future.

“ Our organization is now fit for purpose. We are better positioned to serve each market segment with targeted solutions.”

Chris Goppelsroeder, DSM Executive Committee and President & CEO DSM Nutritional Products

Human Nutrition & Health is moving closer to the consumer. More than 40% of the revenue comes from custom nutrient premixes, retail-ready solutions and consumer products that address areas of health such as cardiovascular, eye, cognitive and gut health. Our consumer products unit, i-Health, continued double-digit growth in 2017 and expanded ahead of expectations globally. Its star brand, Culturelle®, became the world's top-selling probiotic in 2017. The omega-3 business also grew across several regions thanks to innovations like MEG-3® Ultra. Following the North America launch of the MEG-3® Ultra in late 2016, DSM helped successfully convert the US omega-3 dietary supplement category towards concentrates throughout 2017 and further escalated growth of the omega-3 business in other regions. MEG-3® Ultra products leverage our new 3C technology that delivers highly-concentrated and customizable combinations of EPA and DHA while providing peace of mind through a consistent supply chain. It provides brand owners with the versatility to innovate tailored health-focused products to meet consumer needs across a lifetime and to eliminate key consumption barriers of omega-3 supplements such as capsule size.

DSM's business in API applications continued to gain momentum in 2017. The trend for higher levels of vitamins, omega-3 and carotenoids in pharmaceutical applications supported growth. DSM is still the only company that holds CEPs (Certificate of Suitability of Monographs of the European Pharmacopoeia) and the US Drug Master Files for all 13 essential vitamins. This means that pharmaceutical companies working with DSM can get products to market faster.

Our Human Nutrition & Health business also plays an important role in achieving SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-being). The nightmare of hunger continues for 800 million people around the world and two billion more suffer from micronutrient deficiencies, or hidden hunger. That means they receive enough calories to survive, but not enough nutrients to thrive. Children are especially vulnerable. DSM works with a range of stakeholders including

regional and global partners to develop solutions like custom micronutrient interventions and fortified foods.

In May, DSM opened a plant in Rwanda for Africa Improved Foods (AIF), a joint venture with the Government of Rwanda and other international partners. In Rwanda, nearly 40% of children under the age of five have stunted growth, a condition that is caused by malnutrition and often goes hand in hand with impaired cognitive development and other serious, sometimes lifelong health issues. AIF's mission is to address micronutrient deficiencies. The new plant employs 260 people who produce fortified cereals and porridges. AIF sources maize and soy from more than 9,000 local farmers. For more information about AIF and other initiatives that address hunger and malnutrition, see 'Collaborative platforms and networks' on page 28 or visit the company website.

In December, DSM acquired BioCare Copenhagen A/S (Denmark). This acquisition expands our offering in gut health ingredients with probiotics, an attractive market segment in nutritional ingredients, growing an estimated 7% per year.

Personal Care & Aroma Ingredients

Highlights 2017

- Continued growth in both personal care and aroma ingredients
- Improved cost competitiveness in UV filters
- Now offering largest portfolio of UV filters in the world
- Further organizational integration of the two businesses

Sales were €353 million in 2017, up from €337 million in 2016.

Personal Care & Aroma Ingredients offers solutions for customers in the personal care, home care and fine fragrance markets. Our extensive portfolio includes aroma ingredients, vitamins and natural bio-actives, as well as UV filters, peptides and polymers. DSM's solutions support the health and beauty needs of an aging population with various skin and hair types around the world, and the increasing concerns around global public health issues like air pollution and skin cancer.

This business grew well in 2017 thanks to an optimized supply chain and product mix as well as accelerated innovation and stronger customer relationships. We improved cost competitiveness in certain segments like sun care and satisfied high, sustained demand for aroma ingredients. New innovations boosted performance in our skin and hair care segments. We also continued expansion into make-up and body care with sensory modifiers and new performance ingredients.

Sun care was a highlight for the personal care business in 2017. We are on track with our ambitions in the UV filters market. Thanks to a new partnership with Nanjing Cosmos Chemical Co., Ltd., DSM now has the world's largest portfolio of UV filters with the broadest range of protection across UVB, UVA and blue light. The partnership will deliver two new UV filters, PARSOL® Max and PARSOL® Shield. The agreement also improves our supply chain and our ability to expand.

We expect demand for sunscreen to increase. For example, only 14% of men and 30% of women in the US use sunscreen daily. Skin cancer rates are rising and sunscreen is proven to reduce incidence of skin cancer. DSM and our customers are creating awareness around this issue. In 2017, we launched a skin cancer prevention initiative and started offering customers the DSM Sunscreen Optimizer™, a free online tool that helps them develop and fine-tune sunscreen formulations before costly, time-consuming SPF testing. DSM is also raising awareness around the issue of blue light from both the sun and electronic devices. With the launch of PARSOL® Max, DSM was the first to offer solutions that protect skin against oxidative stress from blue light.

DSM's ALPAFLOR®, a successful range of organic bio-actives, is a great example of innovating for the natural trend and was eagerly picked up by customers. Equally, aging populations provide opportunities for growth in the anti-aging segment, where DSM's SYN®-AKE, a small synthetic peptide, is a successful ingredient.

Toward the end of the year, the more centrally organized Aroma Ingredients were further integrated into the regionally-driven Personal Care organization, while retaining strong global key account management and connection to the core manufacturing facility in Lalden (Switzerland).

DSM Food Specialties

Highlights 2017

- New product introductions supporting health & wellness trends
- Solid growth especially in savory ingredients
- Acquisition of Inner Mongolia Rainbow Biotechnology in China for hydrocolloids
- Grand opening of the state-of-the-art biotechnology center in Delft (Netherlands)

In 2017, sales for DSM Food Specialties amounted to €541 million, compared to €536 million in 2016. Organic growth of 3% was driven by a solid performance in hydrocolloids, savory ingredients, bio-preservation, food & crop protection, cultures and enzymes. The latter was hampered by some capacity

constraints and therefore not able to fully benefit from strong demand. Initiatives to expand capacity and optimize supply are underway. Savory Ingredients had a strong year driven by strong demand for its portfolio of yeast extracts, process flavors, and taste modulators to provide an enjoyable taste experience in low-sugar, low-salt, and low-fat applications.

DSM Food Specialties is a leading global supplier of specialty food enzymes, cultures, bio-preservation solutions, hydrocolloids, savory ingredients and solutions for sugar reduction. Our ingredients and solutions are widely used to create a broad range of food products from grocery favorites like yogurt, cheese and soups to specialized products like gluten-free bread or beer, meat substitutes, lactose-free milk and sugar-reduced beverages. With nearly 150 years of experience in biotechnology and fermentation for the food industry, the business group aims to enable better food for everyone, helping make existing diets healthier and more sustainable, and giving increasing numbers of people around the world access to affordable, quality food.

There are five main market trends driving demand for our products: sugar reduction, enhanced taste experience, improved health and wellness, bio-preservation and food chain efficiency. At DSM we are fully committed to delivering innovative solutions that enable food producers to capture the opportunities presented by these trends, providing valuable consumer and market insights alongside our innovative specialty ingredients.

We opened a new state-of-the-art biotechnology facility at our site in Delft (Netherlands) in April 2017, further expanding our R&D capabilities for applications in food and nutrition, feed, fuel, pharma and bio-based materials.

In food enzymes, our market-leading lactase enzyme, Maxilact®, is increasingly popular for its natural sweetening properties, which allow dairy producers to reduce the amount of sugar used in products such as yogurts and flavored milks. Pending legislation in Europe drove demand for PreventASe®, an enzyme that reduces the levels of acrylamide in baked goods and snacks.

We further expanded our dairy portfolio with the introduction of Delvo®Guard, a new range of protective cultures that reduce food waste in dairy. Effectively combating yeast and mold growth, Delvo®Guard helps producers who are looking for clean-label solutions to reduce losses and increase product shelf life.

Solutions such as DSM's ModuMax™ enable producers of foods and beverages to deliver an enjoyable taste experience in low-sugar, low-salt, and low-fat applications, by creating a fuller mouthfeel and masking negative off-notes. ModuMax™, which was made widely available during the year, is also dairy

allergen-free, suitable for vegetarian foods, and certified natural according to EU and US regulations.

DSM's development program for fermentation-derived steviol glycosides, the sweet tasting, zero-calorie molecules from the stevia plant, remained well on track in 2017. Targeted major customers were engaged in prototyping and sampling during the year, with commercial availability expected in 2018.

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 and suspension. Demand for hydrocolloids, especially our natural 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
- Recognition of the benefits of probiotics and prebiotics

Our hydrocolloids are primarily delivered in the form of pectin and gellan gum. Both are used as gelling and stabilizing agents in a variety of foods and beverages. DSM's natural hydrocolloids are enjoying strong sales growth especially versus synthetic and animal derived products. In 2017, we acquired a majority equity stake in Inner Mongolia Rainbow Biotechnology Co., Ltd. in China, further expanding our global hydrocolloids business.





 **@yazalpizar**
Almost there!
#roadtrip #sunset
Spain

People rely on their cars for everything from road trips to work. DSM is driving the future of transportation together with major automotive OEMs. Our materials include lightweight, durable materials that can replace metal in various components. That helps vehicles get better fuel economy and lower tailgate emissions. We're also working on solutions for more integrated electronics, so cars (and drivers) can be more connected and safer.





@missionarctic

What's in our Fo'csle? These awesome ropes from Atlantic Braids! Thanks to @ablrope we have ropes we need for our expedition. #dyneema #atlanticbraids

The crew of Mission Arctic, an Arctic research expedition, chose gear made with Dyneema®, the world's strongest fiber™. Ropes from DSM customer Atlantic Braids help keep the crew safe and successful as they navigate uncharted territory revealing the effects of climate change.









@jen_jiggs

The other helper got kicked out for putting her paws in the paint
#babyroompainting
California

New parents want the best for their babies. Now they can welcome their little ones home to a nursery painted with Sigma Air Pure, a bio-based paint that purifies the air. Sigma Air Pure is based on DSM's Decovery® resins. Made from renewable resources like sugar, natural oils and starch, Decovery® is a safer, healthier and more sustainable alternative to conventional resins, while offering the quality and performance people expect.



Materials

High performance and eco-friendly

Materials for more connected, convenient, sustainable living.

3 GOOD HEALTH AND WELL-BEING



7 AFFORDABLE AND CLEAN ENERGY



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



100%

of mobile devices currently sold contain DSM material

90%

of cars currently sold contain our solutions

15x

stronger than steel: Dyneema®, the world's strongest fiber™

55%

of all internet traffic goes through DSM protected fiber optic cables

€ 2,825

Net sales (in millions) up from € 2,513 in 2016

+7%

Volume growth up from 2016

17.3%

Adjusted EBITDA margin, same as 2016

x € million	2017	2016
Net sales:		
DSM Engineering Plastics	1,448	1,312
DSM Dyneema	332	297
DSM Resins & Functional Materials	1,045	904
Total	2,825	2,513
Organic sales growth (in %)	13	(1)
Adjusted EBITDA	488	435
Adjusted operating profit	361	311
Capital expenditure	124	106
Capital employed at 31 December		
ROCE (in %)	20.0	17.6
Adjusted EBITDA margin (in %)	17.3	17.3
R&D expenditure	130	124
Workforce at 31 December (headcount)	4,635	4,460

Business

DSM's Materials cluster consists of DSM Engineering Plastics, DSM Dyneema and DSM Resins & Functional Materials. DSM is a global player in specialty plastics for the electrical components and electronics, automotive, flexible food packaging and consumer goods industries. The materials portfolio also includes Dyneema®, the world's strongest fiber™, as well as resins for paints, industrial applications and optical fiber coatings. For more information on DSM's Materials cluster, see the DSM Factbook on the company website.

Materials cluster performance

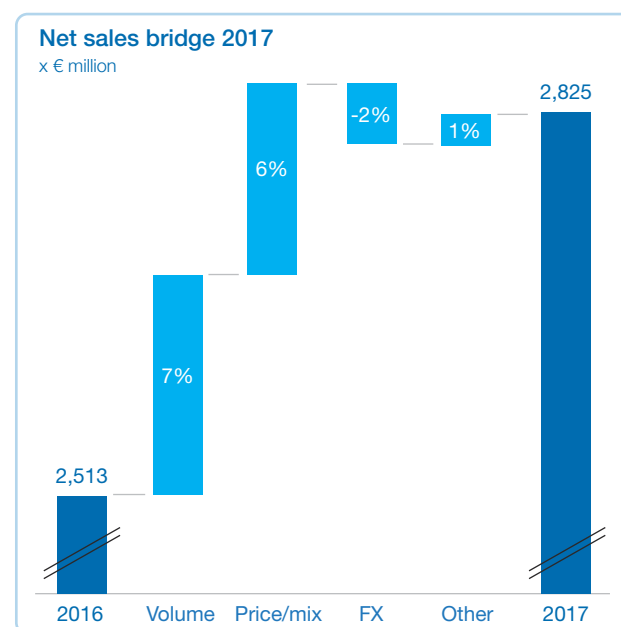
The Materials cluster delivered another year of strong financial performance, continuing the excellent progress made since the start of Strategy 2018. The 'silent transformation' of the materials portfolio through a differentiated approach focusing on specialty products, provides a clear framework to outpace market growth and supported the cluster's performance again in 2017. Growth continued to be driven by demand for more sustainable, innovative, lightweight, environmentally friendly, safer and higher performing solutions.

Full year 2017 sales were up 12% versus the same period last year. Strong growth in specialties was the main driver behind the 13% organic growth, of which 7% was volume growth. The 6% price effect reflected increased input costs. All three businesses in Materials delivered a double-digit percentage organic growth.

Full year 2017 Adjusted EBITDA increased by 12% versus 2016, driven by higher volumes. The Adjusted EBITDA margin was stable at 17.3% as pricing and group-wide cost-saving and efficiency improvement programs offset higher input costs and negative foreign currency effects. This robust financial performance demonstrates the improvements achieved in the quality of returns in Materials over recent years.

“ Our differentiated growth strategy has delivered a major step-up for the Materials cluster.”

Dimitri de Vreeze, DSM Managing Board



Trends

The trend to replace traditional materials by more sustainable alternatives continues. Customers want materials that improve the environmental footprint of their own operations and across their value chains, especially in the areas of energy use and emissions. This trend is driven by concerns over climate change, higher expectations from end-users and stricter government policies.

A better environmental footprint cannot be achieved at the expense of performance, however. On the contrary, DSM's materials must perform better than ever and sometimes in entirely new ways. Today our products are lighter, tougher, harder or softer, more durable, more versatile or more recyclable to meet the demands of designers, process engineers and manufacturers whose ambitions keep rising.

Additionally, people everywhere are increasingly aware of safety, including safe manufacturing and product safety. For example, DSM Engineering Plastics and DSM Resins & Functional Materials offer solutions that eliminate or reduce the use of hazardous substances in plastics and paints. The safety trend also includes a greater focus on personal safety. Dyneema®, the world's strongest fiber™, is ideal in applications such as protective apparel for sports, outdoor recreation and law enforcement.

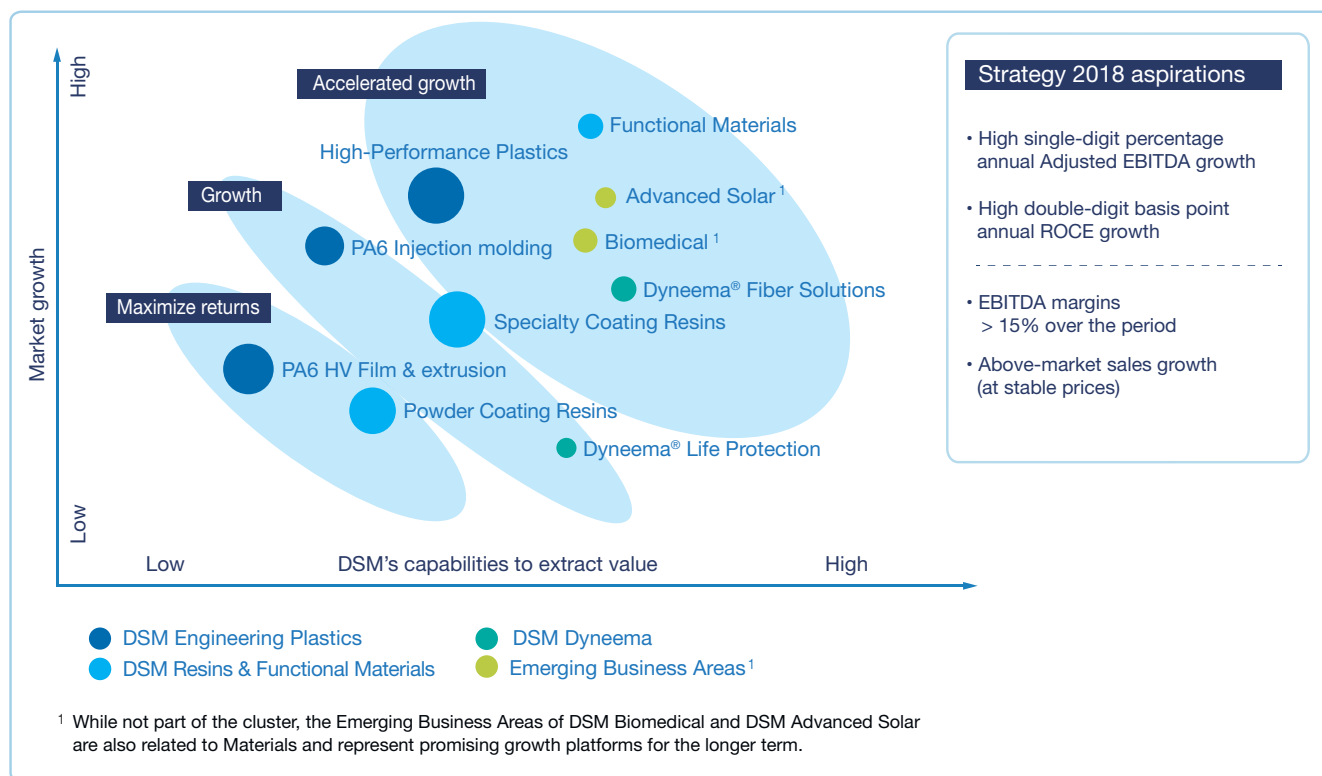
Sustainability & Innovation

The main growth drivers of our Materials cluster are sustainability and the shifts in demand that are happening worldwide as a result of megatrends. Our high-performance specialty products are designed to help customers be more sustainable while offering benefits that go beyond traditional materials. For example, the future of transportation will require higher performing and more complex materials for new autonomous, lightweight and more energy-efficient automotive designs. Materials are also playing a role in other areas such as renewable energy generation and storage, 3D printing, more sustainable packaging and advanced healthcare applications both in and outside of the body.

Increasingly our innovation projects address solutions for a more circular economy. According to the Ellen MacArthur Foundation, the circular economy is one that is "restorative and regenerative by design, and which aims to keep products, components and materials at their highest utility and value at all times". DSM-Niaga is an excellent example. For more information on Niaga®, see DSM Resins & Functional Materials.

The recent opening of our Materials Science Center, a cross-company platform for state-of-the-art know-how, has increased our innovation capabilities. The center has also improved collaboration, especially with DSM Biomedical and DSM Advanced Solar, two of DSM's Emerging Business Areas that offer attractive growth prospects in the longer term.

Another exciting development for Materials innovation in 2017 was the technology partnership agreement with Toyota Motorsport GmbH. Toyota Motorsport is a high-performance development, testing and manufacturing company that offers a wide range of technical services as well as its affiliation with various motorsports. Through the agreement, they will develop and pilot new engineering solutions using DSM's range of high-performance materials and products for the automotive sector including engineering plastics, Dyneema®, additive manufacturing (3D printing) and other technologies.



Strategy

In 2017, we continued with our differentiated growth strategy. For our relatively new portfolio of innovative high-performance plastics, functional materials and high-performance fiber solutions, we are accelerating growth. For our established portfolio of specialty resins, engineering plastic compounds, and solutions for life protection, we are targeting stable growth. For our more mature portfolio of PA6 polymers and extrusion resins, our aim is to maximize returns by efficient product and process management.

Thanks to the consistent implementation of this strategy, our businesses targeting Growth and Accelerated Growth are growing at above-average rates for their respective markets and delivering above-average profitability (see figure 'Strategy 2018 aspirations').

Additionally, in November, DSM announced a new, integrated approach for our additive manufacturing (AM) activities. We aligned all AM activities in one dedicated business unit within the DSM Materials cluster effective January 2018.

We take a balanced view of our Materials business, and therefore as we seize opportunities we also manage risks. These include:

- feedstock price volatility (especially oil and its derivatives);
- developments in disruptive technologies (e.g. 3D printing);
- changes stemming from new legislation and new product and process requirements;
- the commoditization of existing materials or market segments;
- our own ability to develop, bring to market, and manage products that serve society's rapidly evolving needs; and
- the influence of geopolitical and macro-economic developments.

For more information on how DSM manages risks, see 'Risk management' on page 112.

DSM Engineering Plastics

Highlights 2017

- Continued strong volume growth in high-performance plastics
- Good acceptance of ForTii® Ace in market place
- New grade of PA46 Stanyl® HGR2 validated for usage on Ford vehicles

DSM Engineering Plastics had total sales of € 1,448 million in 2017 compared to € 1,312 million in 2016.

DSM Engineering Plastics addresses key market trends in automotive and electronics. About 90% of cars and virtually all mobile devices currently sold contain our materials. During 2017, we continued to shift our portfolio toward higher-value, specialty materials with advanced grades and improved properties.

The quest for new forms of mobility is one of the main trends currently driving our business. We create products that help reduce the weight of vehicles, lower the friction generated by moving vehicle parts and support the transition from petrol/diesel to electric automotive power.

The other key trend shaping our business is the accelerating demand for connectivity between products, devices and applications. For example, vehicles today require more electronic components and are increasingly connected to the digital world. DSM has a proven history in both the consumer electronics industry and the automotive industry.

Driven by these trends, as well as a strong global economy, there was strong demand and strong volume growth for high-performance and engineering plastics across various industries and regions. Higher feedstock prices successfully translated into higher plastic prices, significantly increasing DSM Engineering Plastics' revenue in 2017. Our success was further supported by a more balanced market environment for our PA6 high viscosity extrusion polyamide compounds.

Our high-performance polymer ForTii® Ace, which was launched in late 2016, was well received in the market place in 2017. A versatile, next-generation polyphthalamide, ForTii® Ace is ideal for metal replacement in the automotive sector in transmission components, structural oil pans, front engine covers and other thermoplastics applications. In 2017, we started a number of metal-to-plastic conversion projects with various tier one customers and OEMs.

DSM specialties showed good volume growth across the various industries and regions. Responding to strong customer demand in consumer electronics and automotive markets, we expanded our production capacity for high-performance plastics such as Stanyl® (PA46), ForTii® (PA4T) and EcoPaXX® (PA410).

A new grade of PA46 Stanyl® HGR2 was validated for usage on Ford vehicles. This low-friction, high wear-resistance material is used in chain tensioner arms in the Ford F-150 and Mustang's iconic and innovative 5.0-liter engine, and will soon be implemented across various Ford vehicles globally.

In addition to serving the automotive and electronics sectors, DSM Engineering Plastics provides solutions to specialized industries that address a range of evolving consumer and societal needs. For example, DSM's EcoPaXX® PA410 is a bio-based polymer that can be used to support safer drinking

water. Ideal for faucet components, EcoPaXX® PA410 prevents leakages, increases reliability and serves as a safe alternative to old lead-based systems.

Favorable market conditions and effective business steering delivered good volume growth for our PA6 HV extrusion polyamide compounds, especially in Asia and Russia.

DSM Dyneema

Highlights 2017

- Continued strong growth in the personal protection market with Dyneema® Force Multiplier Technology
- Strong growth in aquaculture
- Launch of Dyneema® Carbon in sports, and increasing number of partnerships to develop sports and automotive applications

DSM Dyneema booked total sales of €332 million in 2017 compared to €297 million in 2016.

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

Dyneema®, the world's strongest fiber™, 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, lightness and high durability makes it suitable for a wide and expanding range of applications. Additionally, in the majority of its applications, Dyneema® is a Brighter Living Solution. Products made with Dyneema® are more sustainable than those made with traditional materials because Dyneema® is lighter in weight, less of the material is needed, it requires less energy in processing and in use, and it gives products a longer lifetime. It is also safer and easier in use, especially in heavy-duty applications.

DSM Dyneema has a well-established fiber business for personal protection as well commercial marine and sports applications. This business delivered double-digit growth in 2017, outgrowing the market as a whole with innovative solutions in both existing and new markets. Continued strong growth was especially noticeable in personal protection solutions, which have replaced vehicle protection as a core focus of our portfolio.

During 2017, we continued our strategy of expanding into new market segments and applications by offering a range of

innovative, unique and patent-protected technologies. Examples include:

- Dyneema® Force Multiplier Technology for comfortable, ultra-light-weight ballistic protection;
- Dyneema® Diamond Technology, which offers increased cut protection and comfort for heavy-duty gloves; and
- Dyneema® Max Technology for offshore deep-water crane ropes and synthetic chains.

In 2017, this business also saw strong growth in demand for applications in aquaculture nets. Designed to keep fish in and predators out, nets made with Dyneema® are easier and safer to handle than traditional nets and support more sustainable fishing techniques.

Our markets for maritime and offshore applications, showed signs of slow recovery. Meanwhile, progress was made in our applications for the renewable energy and craning markets. In the renewable energy market, for example, Dyneema® is used in ropes and lifting slings for constructing and operating onshore and offshore wind farms. Its soft, lightweight characteristics make it ideal for use around delicate blades and can speed up installation. Faster installation lowers costs and makes offshore wind energy more competitive.

The launch of new form factors and applications during 2017 provided opportunities for DSM Dyneema to capture additional value in many markets. These included Dyneema® Flexible Composites for light-weight fabrics with increased tear, puncture and abrasion performance. The year under review saw growth in outdoor applications for this product range, plus the launch of a Dyneema® fabric for protective apparel for law enforcement personnel.

Launched in 2016, Dyneema® Carbon hybrid composite for improved impact resistance and vibrational dampening in sports and automotive applications showed good uptake during 2017.

DSM is also supporting The Ocean Cleanup, an ambitious mission to rid the world's oceans of plastic. The Ocean Cleanup is designing and deploying floating barriers that collect plastic debris. We share our facilities, knowledge and networks, and we supply Dyneema®, an excellent material for tough marine environments.

DSM Resins & Functional Materials

Highlights 2017

- Continued strong growth in fiber optics
- First recyclable carpet with Niaga® commercialized by Mohawk and new DSM-Niaga partnership with mattress company Auping
- Launch of bio-based wall paint from PPG using Decovery® resins platform
- Expanded 3D printing offering

DSM Resins & Functional Materials reported sales of € 1,045 million in 2017 compared to € 904 million in 2016.

DSM is a global leader in the development and production of waterborne, UV and powder coating resins. These products offer clear sustainability advantages over the solvent-borne resins traditionally used in paints and coatings. In functional materials, DSM is the global leader in fiber-optic coatings. In additive manufacturing (i.e. 3D printing), DSM offers highly efficient and effective prototyping technologies which help the industry to accelerate the pace at which new products are designed and brought to market.

We are helping to build a more sustainable future together with our customers and value chain partners. As legislation continues to reduce the use of harmful substances such as volatile organic compounds (VOCs), our growth comes from anticipating changing end-user preferences and offering innovative waterborne, powder and UV resins to replace solvent-borne products. Aside from the technical benefits of the new solutions we bring to market, we ensure that our products help reduce greenhouse-gas emissions in the value chain.

DSM Resins & Functional Materials took a significant step forward during 2017 in a challenging business environment that was affected by raw material shortages in our key technologies as well as natural disasters impacting the southern US. We strengthened our position in core markets such as industrial coatings, architectural coatings and printing inks. Growth in fiber optic materials continued to be driven by demand for ever-increasing broadband speeds and strong uptake of 4G and 5G cellular networks. Strong key account management, high acceptance of powder coatings globally, and of waterborne coatings in Europe and China, are driving current growth. In China especially, a marked increase in environmental awareness is fueling demand for more sustainable coatings, benefiting our resins business.

We are also working on new Brighter Living Solutions for the circular economy, such as Niaga®. More than a product,

Niaga® is a design philosophy. We redesign products from scratch so that all materials can easily be recovered and used again and again. In early 2017, DSM-Niaga partnered with Mohawk, the second-largest flooring maker in the US, to commercialize Niaga® technology for Air.o™, the world's first fully recyclable carpets. In late 2017, DSM-Niaga announced a new partnership with Auping, a bed manufacturer, to create fully recyclable mattresses.

In August 2017, DSM acquired the outstanding 49% of shares in the DSM-AGI joint venture, thereby gaining sole ownership of this Taiwan-based supplier of innovative, high-quality and environmentally-friendly UV-curable resins and other specialty chemicals. DSM originally acquired a 51% stake in DSM-AGI in July 2011 to strengthen our UV-curing technology platform.

In October 2017, global paint maker PPG launched Sigma Air Pure, a new bio-based wall paint targeting the high-end professional interior decoration market. Based on DSM's Decovery® bio-based technology, which was launched in 2016, Sigma Air Pure has an air purification effect. The paint enhances the indoor air climate of homes, offices and schools by removing up to 70% of the harmful formaldehyde from the indoor air and neutralizing it. Decovery® makes an important contribution to the EU's target to make the European paint industry 30% bio-based by 2030.

DSM's 3D printing offering was expanded in 2017 with the introduction of SOMOS® Taurus, a Brighter Living Solution and the latest innovation in our portfolio of stereolithography (SLA) materials. SOMOS® Taurus is the first durable SLA material to withstand elevated temperatures.



3rd prize in the Bright Minds Challenge 2017
Fast-forwarding the renewable energy revolution
WINNER OF THE BRIGHT MINDS CHALLENGE 2017

Winner of the Bright Minds Challenge 2017
Fast-forwarding the renewable energy revolution
WINNER OF THE BRIGHT MINDS CHALLENGE 2017





@BeABrightMind

The WINNER of the #BrightMinds Challenge is INQUIMAE!! 500hrs of invaluable support to fast-forward our transition to 100% #renewableenergy!

Professor Ernesto Calvo from the institute INQUIMAE in Argentina was the winner of the 2017 Bright Minds Challenge, a contest co-hosted by DSM to accelerate the transition to 100% renewable energy. His winning project proposes a new and more sustainable way to extract lithium, a key material for batteries that store energy from renewable sources like solar.

7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Innovation

Science can change the world

DSM delivers innovation with our three Emerging Business Areas

Every 9 seconds a DSM biomedical device is implanted in a patient.

DSM Biomedical

Every day about one million solar panels are installed and right now 200 million use our anti-reflective coating.

DSM Advanced Solar

Every week we ship biofuel from the POET-DSM plant in Iowa (USA).

DSM Bio-based Products & Services

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



21%
innovation sales, achieving our ~20% target

Accelerating the innovation power of our core businesses with breakthroughs like:

- Clean Cow project: feed additives for reduced methane emissions in cattle
- Veramaris joint venture with Evonik: algae-based omega-3 for sustainable aquaculture
- Plant-based proteins for human nutrition
- Niaga® technology for fully recyclable carpets

DSM Innovation Center

x € million	2017	2016
Net sales	169	167
Organic sales growth (in %)	3	6
Adjusted EBITDA	9	1
Adjusted operating profit	(30)	(24)
Capital expenditure	43	32
Capital employed at 31		
December	562	576
R&D expenditure	75	75
Workforce at 31 December (headcount)	685	619

The DSM Innovation Center has two functions. The first is to help develop new business, focusing on areas outside the current scope of the company's business groups. It identifies and invests in new and innovative growth options, initially through the DSM Business Incubator and then by developing and extracting value via the company's Emerging Business Areas (EBAs). The second function is accelerating the innovation power and speed of our core businesses. In this role, the Innovation Center supports all businesses through the Excellence in Innovation Program, DSM Venturing and the IP & Licensing department. In addition, the Chief Technology Officer, through the DSM Science & Technology Department, ensures the quality of the total R&D competence base and adds adjacent technologies for growth through DSM's Corporate Research Program.

The Innovation Center made good progress over the year, delivering on its Strategy 2018 goals to extract value from the Emerging Business Areas, the acceleration of large innovation projects, while simultaneously supporting the Nutrition and Materials business with their growth initiatives.

Full year 2017 sales in the main Emerging Business Area DSM Biomedical showed a strong underlying growth, largely offsetting the gradual discontinuation of a large contract during the year. DSM Advanced Solar delivered good growth in anti-reflective coatings and through the new backsheet activities for solar panels which were added in 2017 through the Sunshine acquisition.

Full year 2017 Adjusted EBITDA increase was largely driven by one-time positive effects from restructurings in DSM Advanced Solar, which had a positive EBITDA effect due to releases of liabilities, whereas the redundancy of certain assets related to these restructurings led to an impairment loss impacting the EBIT negatively.

Creating opportunities for future earnings growth through innovation

In 2017, innovation sales across DSM were 21%, above our aspiration of 20%. Through innovation, we are preparing for even more growth beyond 2018. We further focused our innovation program on a smaller number of bigger projects, providing interesting opportunities for 2019-2020 and onward. Examples include:

- The Clean Cow project for feed additives that reduce methane emissions in cattle
- The Green Ocean partnership with Evonik (now called Veramaris) for algae-based omega-3 for sustainable aquaculture
- The fermentative stevia sweetener platform
- Plant-based proteins for human nutrition
- Sustainable biological solutions for crop protection in agriculture
- Niaga[®] technology for fully recyclable carpets
- ForTii[®] high-performance plastics
- Dyneema[®] carbon composites

Enabling DSM's Bright Science

The ability to deliver innovative products and solutions is essential to DSM's business success and positive impact on society. The 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 that underpin our science-based, sustainable solutions.

R&D expenditure (including associated IP expenditure)

x € million	2017	2016
Nutrition	219	205
Materials	130	124
Innovation Center	75	75
Corporate Activities	20	22
Total	444	426
Total as % of net sales	5.1	5.4
Staff employed in R&D activities (total DSM)	1,920	2,055

“ Our innovation portfolio really reflects the choices we've made and defines the company we want to be. Today the overwhelming majority of our innovation pipeline is based on sustainability. ”

Rob van Leen, DSM Executive Committee

Marcus Remmers joined DSM in April 2017 as Chief Technology Officer. A transformational leader and team-builder with a wide-ranging international background, Marcus has extensive experience in polymer and life sciences R&D, business operations, business development, strategy, and change management.

DSM has seven scientific competence areas. These are in analytical, biological, chemical, engineering, macromolecular, materials, and nutritional sciences. All seven are key to the company's continued success. The Science & Technology Department ensures that DSM has the right combination of skills, capabilities and partners to maintain and deliver on these competence areas.

Our internal science network consists of more than 1,900 people, including 25 professors and academic associates, who are spread across the globe. These employees co-operate extensively with external R&D institutions, both in academic collaborations and in broader public-private partnerships, such as the Bio-based Industries Consortium.

In line with this Open Innovation approach, DSM also regularly connects with its international Scientific Advisory Board. Acting under the supervision of the Chief Technology Officer, the Board provides valuable different perspectives and insights, challenges and reviews our scientific work and gives advice on trends and upcoming disruptive technologies. It comprises five internationally recognized experts in the fields of materials, biotechnology and nutrition from leading universities in the US and Europe.

Scientific Advisory Board

Member	Background
Chris Voigt (m)	Professor of Advanced Biotechnology in the Department of Biological Engineering at Massachusetts Institute of Technology (US). He is the Co-Director of the Synthetic Biology Center at MIT and the Co-Founder of the MIT-Broad Foundry. He is also Editor-in-Chief of ACS Synthetic Biology. Nationality: American.
Wolfgang Marquardt (m)	Chairman of the Board of Forschungszentrum Jülich (Germany), Vice-President of the Helmholtz Association, and Coordinator of the Research Field Key Technologies. He also co-founded AixCAPE e.V., a technology transfer platform in the field of computer-aided process engineering, and its spin-off S-PACT GmbH. He has more than 350 ISI-listed publications. Nationality: German.
Philip Calder (m)	Professor of Nutritional Immunology at the University of Southampton (UK). He has won many internationally recognized awards for his work, and is also Chair of the Scientific Committee of the European Society for Clinical Nutrition and Metabolism (ESPEN) and President of the Nutrition Society. Nationality: New Zealand.
Frank Bates (m)	Regents Professor of Chemical Engineering and Materials Science at the University of Minnesota (US). His research involves the thermodynamics and dynamics of polymers and polymer mixtures. He has co-authored more than 400 publications and over 20 patents. Nationality: American.
Craig Hawker (m)	Director of the California Nanosystems Institute, Dow Materials Institute, Facility Director of the Materials Research Lab and Heeger Professor for Interdisciplinary Science at the University of California, Santa Barbara (US). He has co-authored over 500 scientific papers and holds more than 70 US patents. Nationality: Australian.

DSM's new Materials Science Center in Sittard-Geleen (Netherlands) was established in 2017 to better service the current and future science needs of our Materials businesses. Joining forces across the Materials R&D organization will boost innovation and competitive positioning of businesses that draw on materials science.

April 2017 saw the grand opening of a new state-of-the-art biotechnology center at our site in Delft (Netherlands) to accelerate our biotechnology research and development capabilities for applications in food and nutrition, feed, fuel, pharma and bio-based materials. The facility has been named the Rosalind Franklin Biotechnology Center in honor of pioneering scientist Rosalind Franklin (1920-1958), whose extraordinary work during a tragically short life and career significantly contributed to our understanding of the structure of DNA, effectively creating the basis for modern biotechnology. By honoring Rosalind Franklin, DSM pays tribute to all female heroes of science. The biotechnology center forms the heart of Biotech Campus Delft, an initiative of DSM Delft, Delft University of Technology, the City of Delft and the Province of South Holland to enhance the city's standing as a world-leading location for biotechnology development.

DSM Venturing

DSM Venturing invests in innovative companies in areas strategically relevant to DSM's current and future businesses. Our portfolio comprises 25 active investment companies. Each year, DSM Venturing reviews well over 500 new candidates.

In 2017, we entered into a number of new venturing investments and completed one significant financial exit. We also continued our involvement in the SunRISE TechBridge Challenge see 'Innovation partnerships' on page 95.

For more information on DSM Venturing, see the company website.

IP & Licensing

IP & Licensing is a global group of qualified IP professionals who protect DSM innovations with patents and trademarks. This group also includes certified licensing professionals who offer expertise for intellectual property-intensive deals across all DSM businesses, including joint development agreements, technology acquisitions and sales, as well as in-, out- and cross-licensing deals.

In 2017, DSM filed 282 patents, somewhat below our long-term average. This reflects our changed business portfolio and a greater focus on fewer innovation projects with higher potential for business impact.

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. DSM has three EBAs:

- DSM Biomedical
- DSM Bio-based Products & Services
- DSM Advanced Solar

The EBAs delivered a total of € 17 million in Adjusted EBITDA in 2017 (2016: € 16 million).

DSM Biomedical

DSM Biomedical is a trusted partner to the global medical device industry, enhancing the quality and delivery of healthcare, and shaping the future of biomaterials and regenerative medical devices. Every nine seconds, a patient somewhere in the world receives a medical device containing a DSM biomedical solution.

With global reach backed by a leading research and distribution network based in the US and the Netherlands, our product portfolio, technologies and expertise enable medical device companies to advance care across a wide range of medical specialties. These products address key global trends in medicine, from treating an aging global population to supporting more active lifestyles, while at the same time answering the need for safer, less invasive and more cost-effective procedures.

Through our investment in research and our state-of-the-art capabilities, we create, develop and produce innovative materials for our partners, as well as components, sub-assemblies and full medical devices. Our technology portfolio of high-quality advanced healing solutions includes biomedical polyurethanes and polyethylenes, resorbable polymers, bioceramics, collagens, extracellular matrices, device coatings, and cellular therapy platforms. These are used in applications in some of the world's most attractive high-growth markets, including orthopedics, soft tissue, cardiology, diabetes management, and general and reconstructive surgery.

Key trends shaping the global medical device industry in 2017 included:

- the shift toward value-based reimbursement with market success for products that have proven clinical and health economic outcomes;
- large-scale industry consolidation of medical device companies and attendant supply chain rationalization; and
- the quest for proven, largely de-risked products and concepts that can be developed into innovative, finished medical devices.

DSM Biomedical made good progress in 2017. Assisted by growth from product innovations in medical devices for selected therapeutic areas, DSM Biomedical outpaced its attainable market while capturing higher-value business.

DSM Bio-based Products & Services¹

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 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. In particular, DSM has developed patented bioconversion technologies (yeast and enzymes) for various feedstocks and processes (including starch-based and cellulosic) in the biofuels industry. DSM's strategy is to deliver unique and differentiating technologies that enable biofuel plant operators to optimize their processes and maximize their yield and co-product creation. This helps make the production of biofuels even more sustainable.

Starch-based bio-ethanol

DSM developed a proprietary yeast which has demonstrated a significant ethanol yield increase. The product is under extensive market testing and evaluation. Full-scale commercial launch in the US ethanol market is planned in 2018.

Cellulosic bio-ethanol

The POET-DSM Advanced Biofuels joint venture operates a commercial-scale production facility for cellulosic bio-ethanol in Emmetsburg (Iowa, USA). This facility processes corn-crop residues through a bioconversion process that uses enzymatic hydrolysis followed by fermentation. DSM's biotechnology has demonstrated its unique proposition and performance. In the first quarter of 2017, significant improvements to the reliability of the process were made, including the redesign of the pre-treatment set-up, which resulted in improved performance. The delays in the start-up together with the pre-treatment re-design led to an impairment of €65 million in the third quarter of 2017. Since then, bio-ethanol production volumes have improved month on month, and POET-DSM is now shipping to customers on a weekly basis. As a result of the improved process reliability, POET-DSM is building an enzyme production plant at the Emmetsburg site that will be integrated into the process and forms a key component of the technology package.

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 had a successful operational year in 2017, which exceeded the original targets for its low-pH yeast fermentation technology. In April, Biosuccinium[®] S grade was approved as 100% natural by ECOCERT. In June, Bonderalia Italia launched a new natural and multifunctional emulsifier for use in the cosmetics industry based on Biosuccinium[®] S and organic pumpkin seed oil, while in July, VAUDE launched a range of high-end trekking footwear containing Biosuccinium[®]. Reverdia invested substantially in market and application development in 2017 and saw customers increase by 30% in the period from 2016-2017.

DSM Advanced Solar

Solar photovoltaic (PV) capacity is growing faster than any other fossil or renewable power source. 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. Increased efficiency reduces the cost of energy delivered.

Coatings are one area of expertise. Today more than 50 GW of solar modules have been produced using DSM coating technologies. In 2017, we expanded our anti-reflective coating market leadership position and launched a new product, DSM Anti-Soiling coating. Solar modules treated with this new coating soil less quickly, are easier to clean and maintain better power output.

We also developed a new Brighter Living Solution — innovative conductive backsheets for use with back-contact cells. Back-contact cell technology offers better efficiency and value for photovoltaics, and lowers the levelized cost of energy see 'Explanation of some concepts and ratios' on page 240. To complement our offering, we acquired and integrated Chinese-based company Suzhou Sunshine New Materials Technology Co., Ltd. in 2017. Sunshine brings high-performance, innovative non-fluorinated backsheet products with a proprietary technology base.

New solar energy projects in China, the US and India drove demand throughout the year. DSM's focus on being first to market for anti-reflective coating technology in India led to an especially strong position with leading manufacturers of solar PV modules. Furthermore, DSM is supporting the transition to improved and more sustainable backsheet technology with companies like Vikram Solar in India.

DSM Business Incubator

The DSM Business Incubator explores potential future business opportunities in areas with a close link to DSM's

¹ DSM's interest in the net result of the joint ventures POET-DSM and Reverdia is reported as part of 'Share of the profit of associates and joint ventures'.

technologies and competence base. Platforms are created within the scope of securing society's food, health and energy requirements, in close collaboration with industry partners and existing and potential customers. DSM's Business Incubator feeds our new product pipeline with opportunities that address unmet customer needs.

In 2017, the DSM Business Incubator worked on three key ventures. In the Canola venture, we produce a high-quality plant protein for food & beverage applications from biomass derived from rapeseed, also known as canola.

A demonstration unit is now up and running, pre-marketing volumes are being developed for application development, and market interest in our CanolaPRO™ solution was very strong in 2017. In our energy storage project, meanwhile, a number of potential leads were explored, generating interest on the part of several battery/separator companies. The third venture is our partnership with Syngenta (see next section, 'Innovation partnerships').

Innovation partnerships

DSM's ongoing R&D partnership with Syngenta develops and commercializes biological solutions for agriculture. Our aim is to accelerate the delivery of a broad spectrum of products based on naturally occurring micro-organisms for pre- and post-harvest applications. The project has a long-term focus and high potential. Our cooperation made excellent progress in 2017 as we worked to accelerate the development of these solutions.

DSM has several other partnerships as well. For example, in 2017, we ran the SunRISE TechBridge II challenge together with Fraunhofer TechBridge and Greentown Labs, building on the success of the inaugural challenge in 2016. Once again it allowed us to evaluate opportunities for collaboration and investment that could accelerate innovation in our solar business. There were 56 applications and four early-stage companies were announced as winners in 2017.

Bright Minds Challenge

In 2017, DSM together with several partners from the public and private sector sparked a movement to help fast forward the 100% renewable energy revolution. The Bright Minds Challenge mobilized scientists, governments, businesses and civil society. We called on people from around the world to submit their projects and ideas for solar energy and energy storage. We received 55 submissions from 22 countries across five continents. The three most promising solutions were awarded with expert support from DSM and partners to help them scale up as quickly as possible.

The first prize in the Bright Minds Challenge was won by Professor Ernesto Calvo (Argentina), who invented a new way of extracting lithium that is powered by solar energy and is quicker and cleaner than any existing technology.

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	2017	2016
Net sales	59	71
Adjusted EBITDA	(105)	(105)
Adjusted operating profit	(144)	(141)
Capital expenditure	12	16
R&D operating expenditure	20	22
Workforce at 31 December (headcount)	2,058	2,447

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 2017, the total retained damages were €23 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 focuses 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

Executives participate in the Long-Term Incentive (LTI) scheme linking their reward to longer-term stakeholder interests and providing an attraction and retention vehicle. As shares / share units have become more prevalent in the market, the switch from stock options to shares / share units was made in 2017, resulting in better alignment with the LTI vehicle in place for the Managing Board and Executive Committee and aiming for an even closer alignment with the interests of DSM's stakeholders. Because of this switch, the company has reduced its hedge obligations. For detailed information, see Note 27 of the 'Consolidated financial statements' on page 210.

Partnerships

As part of DSM's strategic transformation and move away from more commoditized and cyclical areas, we 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 (ChemicalInvest in 2015).

The results of these joint ventures are reported under 'Share of profit of associates and joint ventures' and 'Other results related to associates and joint ventures' in the Consolidated income statement on page 158. See also 'Associates and joint ventures' on page 183.

These joint ventures were created with the intention of ultimately exiting these businesses and maximizing value.

DSM Sinochem Pharmaceuticals

x € million (100%)	2017	2016
Net sales	440	431
Adjusted EBITDA	73	62
Adjusted operating profit	42	34
Capital employed at 31 December	323	223

DSM Sinochem Pharmaceuticals (DSP) continued to deliver strong growth over the year as its sustainability-driven antibiotics platforms are increasingly valued by the market. Sales growth was partly offset by negative foreign currency effects. DSP is 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. DSP 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 chemical processes. Headquartered in Singapore, the group has manufacturing sites and sales offices in China, India, Egypt, the Netherlands, Spain, the US and Mexico.

Sustainable antibiotics

DSP takes a leading role in making and promoting sustainable antibiotics. Its high-quality APIs, called PureActives®, are manufactured using enzymes rather than chemicals. This process emits much less CO₂. Additionally, DSP sites worldwide have implemented requirements for clean and sustainable production. It operates dedicated waste water

treatment plants at all manufacturing sites in combination with antimicrobial activity testing.

DSP works with partners across the entire value chain to buy, use and sell responsibly made antibiotics. Its approach includes taking a proactive stance on antimicrobial resistance (AMR). DSP is a signatory company to the UN Industry Roadmap on combating AMR and member of the Pharmaceutical Supply Chain Initiative. In 2017, DSP joined the AMR Industry Alliance as a member of the Board and several working groups. This alliance brings together over 100 research-based pharmaceutical, generics, biotech and diagnostic companies and associations, to drive and measure the life sciences industry's progress in curbing antimicrobial resistance.

Patheon

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 lifecycle management. In 2017, DSM divested Patheon. Cash proceeds were about € 1.5 billion. Together with the approximately € 0.5 billion in cash that DSM already received in recent years, including the proceeds from the Initial Public Offering of Patheon, the total cash proceeds from the divestment of DSM's custom manufacturing activities in Pharma amount to approximately € 2.0 billion.

ChemicalInvest

x € million (100%)	2017	2016
Net sales	1,933	1,802
Adjusted EBITDA	205	107
Adjusted operating profit	156	(36)
Capital employed at 31 December	454	556

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. ChemicalInvest showed a good financial recovery in 2017 driven by favorable conditions in the caprolactam and acrylonitrile markets and continued growth in the composite resins market, combined with an improved cost structure and lean operational management.

Financial and reporting policies

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, which are outlined from page 18 onwards. 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 our commitments under the dividend policy and under management and employee option and share plans, DSM buys back shares insofar as this is necessary and feasible. In the year, 4,500,000 shares were repurchased to meet these obligations (2016: 5,200,000 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, under strict conditions, operating companies may 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 2017. The company reports on People, Planet and Profit information in such a Report on an annual basis. The previous DSM Integrated Annual Report was published on 2 March 2017.

In the Report by the Managing Board, we explain our vision and policy with respect to sustainability practices and report on our activities in this field during 2017. In addition to disclosing data and developments in the categories of People, Planet and Profit, we also report on the global societal megatrends that drive our strategy, sustainability governance framework, stakeholder engagement activities, and management approach on material topics. DSM proactively seeks out the views of 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 2017, submitted to the UN Global Compact Office. Our Code of Business Conduct, our Sustainability, Human Resources, and Safety, Health and Environment (SHE) policies, and our Supplier Sustainability Program are the foundations on which DSM applies the standards of the Global Compact.

We have also aligned our strategy with the Sustainable Development Goals (SDGs). DSM is familiar with the opportunities and responsibilities that the SDGs represent for DSM's business. Based on our mapping, we believe that we contribute to all of them, and have chosen to focus on the goals which most closely align with our strategic ambitions. In this Report, we continue to include the SDGs into our reporting process, for example by mapping SDG reporting priorities in our value creation model, our material topics, and the solutions that we highlight.

Principles of the UN Global Compact¹

		DSM Code of Business Conduct (page 108 - page 111) and relevant page(s) in the Integrated Annual Report 2017
Principle 1	Support of human rights	page 41, page 140, page 148
Principle 2	Exclusion of human rights violation	page 41, page 140, page 148
Principle 3	Observance of the right to freedom of association	page 41
Principle 4	Abolition of all forms of forced labor	page 41
Principle 5	Abolition of child labor	page 41
Principle 6	Elimination of discrimination	page 10 to page 11, page 37 to page 38, page 41
Principle 7	Precautionary environmental protection	page 10, page 46 to page 51
Principle 8	Specific commitment to environmental protection	page 46 to page 51, page 145 to page 146
Principle 9	Diffusion of environmentally friendly technologies	page 10 to page 11, page 46 to page 51, page 68 to page 75, page 82 to page 87, page 90 to page 95, page 139
Principle 10	Measures to fight corruption	page 112 to page 116, page 148

¹ In 2017, DSM once again renewed its commitment to the UN Global Compact's CEO Water Mandate; see 'Planet' on page 50.

Global Reporting Initiative

At DSM we base our sustainability reporting on international non-financial reporting guidelines. We frequently assess to what extent sustainability aspects become material to our company and our 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.

This Report has been prepared in accordance with the GRI Standards: Comprehensive option. 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 us to better identify and communicate how the company creates value for stakeholders in People, Planet and Profit, as well as the interconnection between these three dimensions.

The Taskforce for Climate-related Financial Disclosures

In 2017, the Taskforce for Climate-related Financial Disclosures (TCFD) released its recommendations for a set of voluntary, climate-related financial disclosures for use by companies to provide information to their stakeholders. DSM is among the first companies to commit to implementing, as fully as practicable, these recommendations over the next three years as outlined in the TCFD's implementation path. DSM is investigating how to implement these recommendations and will provide more information on this in subsequent reports.

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 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 stakeholders), and topics whose importance warrants publication on the company website only (topics important to either DSM or stakeholders). DSM reports on external recognition in 'Stakeholders' on page 31. Other examples of external recognition can be found on the company website.

Scope

The People 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 People data 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, People data to the end of the month of divestment, and Planet data are reported to the last full year at DSM.

Planet methodology

Our progress on the key environmental performance indicators is re-evaluated annually. Data on these indicators are collected twice a year for all DSM sites. The data are based on these sites' own measurements and calculations, which in turn are founded 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 using 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 any 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 our portfolio as well as by improvements to measurement and recording systems at the various sites. Whenever impact is relevant, this is stated in the Report. Details for the regions, as well as the methodology and calculations, are published on the company website, together with an explanation of the definitions used.

People methodology

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

Brighter Living Solutions

For a definition of Brighter Living Solutions, see 'Explanation of some concepts and ratios' on page 240. DSM reports twice a year the percentage of Brighter Living Solutions within the running business portfolio.

The sustainability assessments to support the qualification for Brighter Living Solutions are required to be made by internal Life Cycle Assessment (LCA) experts and reviewed using the four-eyes principle 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 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 any 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 an organizational structure built around business groups that are empowered to carry out all short-term and long-term business functions, in which activity they are assisted by support and corporate functions, as well as by regional organizations.

Managing Board and Executive Committee

Since 2015, DSM's management structure has been strengthened by the establishment of an Executive Committee. The Executive Committee was installed to enable 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 with respective responsibility for DSM Nutritional Products (Chris Goppelsroeder), Corporate Strategy & Acquisitions (Philip Eykerman), the DSM Innovation Center (Rob van Leen), and Group People & Organization (Peter Vrijzen, who was succeeded by Judith Wiese as of 1 January 2018). The latter four managers are appointed by the Chairman of the Managing Board after consultation with the Supervisory Board. The Executive Committee focuses on topics such as the company's 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 remain unchanged.

The Managing Board is ultimately responsible for the company's strategy, its portfolio management, the

deployment of human capital and financial capital resources, the company's risk management system, the company's financial performance, and its performance in the area of sustainability. It is hence also the Managing Board that is accountable to the Supervisory Board for the company's strategy and management. To this end, the full Managing Board attends the Supervisory Board meetings, whereas the other Executive Committee members attend those (parts of) Supervisory Board meetings that are specifically relevant to their area of responsibility.

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 131. Since the introduction of the Dutch Corporate Governance Code in 2004, 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 Managing Board members 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 222.

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 2017, the Managing Board had nine formal meetings and 41 Executive Committee meetings, some of them by teleconference. No Managing Board member had to be excused from meetings during the year. In three 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 comprises 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 130. Members of the Supervisory Board are appointed for a period of four years and may then be reappointed for a period of four years. A Supervisory Board member may then subsequently be reappointed for a period of two years, which appointment may be extended by at most two years. For reappointment after an eight-year period, reasons must be provided in the report of the Supervisory Board.

All current members of the Supervisory Board are independent in accordance with the Dutch Corporate Governance Code. The remuneration of the Supervisory Board members 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. Since the inception of an Executive Committee, the Supervisory Board has also had the responsibility to ensure that the checks and balances that are part of the two-tier system are still taken into account, paying specific attention to the dynamics between Managing Board and Executive Committee. The Supervisory Board is enabled to do so through the information provided to it by the Managing Board.

The annual financial statements are approved by the Supervisory Board and then submitted to the Annual General Meeting of Shareholders (AGM) for adoption, accompanied by an explanation by the Supervisory Board of how it carried out its supervisory duties during the year under review.

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. The Supervisory Board has drafted diversity policies for the Supervisory Board, the Managing Board and the Executive Committee. These policies strive for a balanced composition of the respective body, taking into account gender, age, knowledge, experience, and nationality / cultural background. In addition, for the composition of the Supervisory Board, the board tenure is taken into account. In terms of gender diversity, DSM strives for a composition of its Supervisory Board, Managing Board and Executive Committee, whereby at least 30% of the positions are held by women and at least 30% by men, which is in line with Dutch legislation. In order to ensure a balanced composition in terms of nationality / cultural background, DSM's aim is not to have more than 50% of the members of its Supervisory Board or Executive Committee representing one nationality. While a diverse composition in terms of nationality / cultural background is also taken into account in the composition of the Managing Board, no quantitative aim is set here, given the relatively small number of Managing Board members.

The diversity policies are implemented by applying them to nominations for (re)appointment of Supervisory Board and Managing Board members as well as to appointments of Executive Committee members. In 2017, two Supervisory Board members were appointed, strengthening the diversity within the Supervisory Board in terms of age, knowledge and experience. With the appointment of Frits van Paasschen, a member with a broad business background, including knowledge of disruptive business models and digital technology, was added. In view of Tom de Swaan stepping down at the 2018 AGM, the continuity of the financial and accounting experience and knowledge within the Supervisory Board was ensured with the appointment of John Ramsay. The same holds for the reappointment of Dimitri de Vreeze as member of the Managing Board: this ensured the diversity in experience and knowledge within the Managing Board, more specifically the continuity of experience and knowledge with respect to Materials. The diversity in terms of gender and nationality / cultural background in DSM's Executive Committee was strengthened with the appointment of Judith Wiese, who succeeded Peter Vrijzen as head of DSM's Group People & Organization as of 1 January 2018. All in all, both DSM's Supervisory Board and Managing Board were well balanced in 2017 in terms of gender, with 38% (rising to 43% after the 2018 AGM, with Tom de Swaan stepping down) and 33% women respectively, which is in line with Dutch legislation in this regard. With the appointment of Judith Wiese, the gender diversity within DSM's Executive Committee will rise to 29% women, coming very close to the target of 30% of the positions being held by women and at least 30% by men. The composition of both DSM's Supervisory Board and the Executive Committee are in line with the target of not having more than 50% of the members representing one nationality. 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 on ordinary shares;
- 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 AGM is held within six months of the end of the financial year in order to discuss and, if applicable, adopt 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.

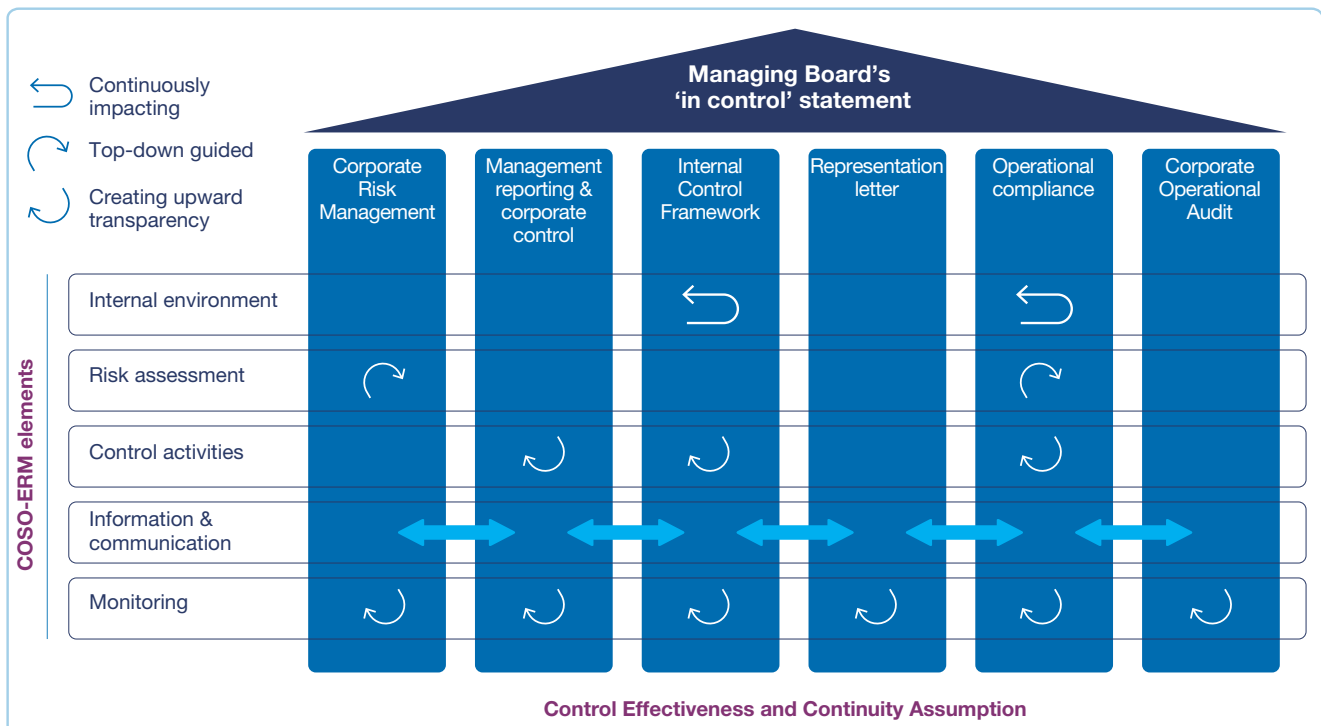
The AGM and, if necessary, other General Meetings of Shareholders are called by the Managing Board or the Supervisory Board. The agenda and explanatory notes are published on the company website.

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 General Meeting of Shareholders.

The AGM was held on 3 May 2017. The agenda was to a large extent similar to that of previous years. Additional topics were the appointment of John Ramsay and Frits van Paasschen as members of the Supervisory Board and the reappointment of Dimitri de Vreeze as member of the Managing Board. The Articles of Association were amended to reflect a change in the way the dividend percentage on the Cumulative Preference Shares A is calculated. Further details can be found on the company website.

Control effectiveness and continuity assumption

The 'Statements of the Managing Board' are reported on page 117. These conform with the Dutch Corporate Governance Code best practice 1.4.3 on 'Board Statements'.



DSM visualized its control environment as a 'house' that includes the internal control process areas with control measures related to the strategic, operational, compliance

and reporting risks. The elements of COSO (the Committee of Sponsoring Organizations of the Treadway Commission) provide a framework for identifying the DSM activities that are

executed to ensure the control environment is adequately structured. Finally, to ensure a learning curve is achieved, monitoring activities include sharing findings, experiences, and control measures across the supporting pillars.

DSM has a three lines of defense structure to manage risks, see also 'Risk management' on page 112. Corporate Operational Audit (COA) is in the third line of defense. The scope and frequency of the COA audits is set according to the ranking of the auditable units by the magnitude of risk, based on a limited number of defined characteristics.

COA assesses the operation of risk management activities by the units as well as the design of the risk management and internal control systems by performing risk-based audits looking at the key processes and activities for the specific units. With these audits, COA closes the risk management cycle and provides additional assurance to the Managing Board on the effectiveness of the design and operation of the risk management and internal control systems.

COA reports its audit results twice a year to the Managing Board. It also shares an overview with the Audit Committee of the Supervisory Board and communicates the executive summary of each audit report to the CFO and CEO.

In 2017, COA executed 51 audits. In general, findings are considered improvement opportunities as part of a healthy learning culture. In about 5% of the audited areas (e.g. operations, finance, SHE, commercial) significant management attention was needed to come to the DSM standard. In the rare event of insufficient follow-up of a finding, the Director of COA escalates the finding to the CEO.

Dutch Corporate Governance Code

DSM supports the Dutch Corporate Governance Code, which was most recently amended in 2016 and is applicable as of the financial year 2017. The Dutch Corporate Governance Code can be found on www.commissiecorporategovernance.nl.

DSM ensures its continued compliance with the Dutch Corporate Governance Code, and has worked on implementing the amendments in its internal regulations and practices where applicable. The last step in this process will be the amendment of DSM's Articles of Association, for approval by the 2018 General Meeting of Shareholders.

Long-term value creation is embedded in both DSM's Strategy 2018: *Driving Profitable Growth* and the company's culture: our mission is to create brighter lives for people today and generations to come. Sustainability is at the core of how we fulfill that mission, and to achieve this, DSM considers People, Planet and Profit in all we do. With our Strategy 2018, we drive our business and innovation strategies in order to

address the challenges of nutrition & health, climate & energy and resource scarcity. More information on how long-term value creation is fundamental to our strategy and culture can be found in the Strategy and People sections of this annual report, as well as on page 24 (which describes how we create value for all our stakeholders) and on page 10 (which describes how DSM engages with the SDGs).

With respect to the appointment of members of the Managing Board for a period of at most four years (Best Practice 2.2), it should be noted that DSM has adhered to this Best Practice since the introduction of the Dutch Corporate Governance Code in 2004. Since DSM respects agreements made before the introduction of the 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 organized into clusters, thus ensuring coherence of operations and the leveraging of resources within each cluster. The clusters are the main organizational entities for external strategic and financial reporting. This structure ensures flexibility, efficiency and speed of 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 achieving its ambitions. The support functions and functional excellence departments are paid for the services they supply by the users, which are for the greater part the business groups and to a lesser extent other DSM

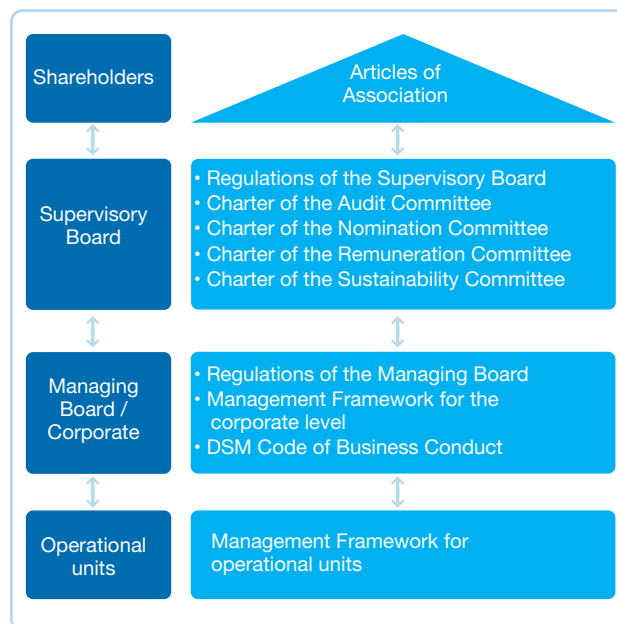
units. Corporate departments are paid from a corporate budget.

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 ICT. 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 Managing Board, Executive Committee, functional and regional levels, and includes the governance relations with the immediately superior levels (Supervisory Board and shareholders) and the operational units.

The company's strategic direction and objectives are set by means of a Corporate Strategy Dialogue. In November 2015, DSM presented the outcome of the latest Corporate Strategy Dialogue: 'Strategy 2018: *Driving Profitable Growth*', which is described in detail in DSM's Integrated Annual Report 2015 and on the company website. As we delivered well ahead of this strategy for the second year in a row in 2017, we brought forward our regular strategy review process for the period beyond 2018.

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, 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, monitor the effectiveness of the risk management and internal control system by process risk assessments and internal audits, and regularly discuss the findings with the responsible Executive Committee member.

Independent audits for all operational units are 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 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 for the implementation of the DSM rules on the holding and execution of transactions in DSM financial instruments, among other things. A third committee at corporate level is the Fraud Committee, which was installed to ensure structural follow-up of fraud cases with the aim of reducing fraud exposure. Relevant corporate functions participate in the Fraud Committee under the chairmanship of the CFO.

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 2017:

- 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, the strategic partnership with the World Economic Forum, nutrition related initiatives including the WFP partnership, and chaired the Inclusion & Diversity Council;
- Geraldine Matchett integrated sustainability into financial decision making and represented DSM in the Accounting for Sustainability (A4S) CFO Leadership Network. She also oversaw our efforts and commitment towards the Taskforce for Climate-related Financial Disclosures recommendations; and
- Dimitri de Vreeze was responsible for Safety, Health and Environment (SHE) and also 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 122.

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 2017 together with the Managing Board and a number of senior executives. Subjects discussed included DSM's corporate sustainability strategy, innovation project updates, climate strategy, circular and bio-based solutions, and a feedback session on the Bright Minds Challenge and possible next steps. They also had the opportunity to visit the new Rosalind Franklin Biotechnology Center in Delft (Netherlands). At the same time, Jessica Fanzo who joined in late 2016 and Robin Chase who joined in 2017 were welcomed to the Sustainability Advisory Board by Feike Sijbesma.

Sustainability Advisory Board

Member	Background
Robin Chase (f)	Co-founder and former CEO of Zipcar, co-founder of Veniam, board member of the World Resources Institute, and Tucows, and serves as an informal advisor to many cities, national governments, and transport agencies on the transition to shared automated vehicles. 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, Director of the Global Food Ethics and Policy Program and co-chair of the Global Nutrition Report. She has previously held positions in nutrition advisory, advocacy and research organizations in the US, Rome (Italy) and Kenya. Nationality: American.
Paul Gilding (m)	Social entrepreneur, author and corporate strategy advisor. Fellow at the 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)	Partner at SYSTEMIQ since 2017. Special representative for climate change of the UK government from 2013 to 2017. 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.

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 best practices and communications on SHE issues.

DSM Code of Business Conduct

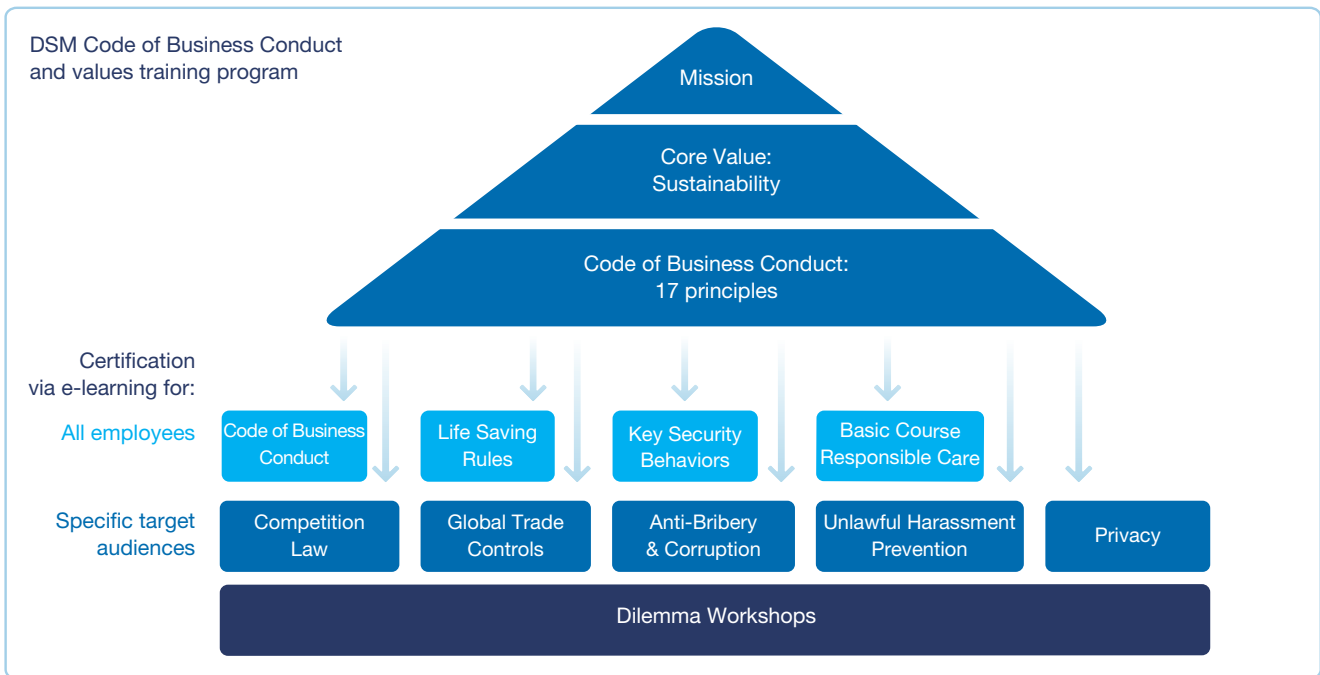
Introduction

The DSM Code of Business Conduct ('the Code') serves as an umbrella for several other DSM regulations and forms the basis for the company's ethical business behavior. In 2017, we updated the Code to emphasize the importance of long-term value creation and our company culture as well as to align it more closely with daily operations. This included:

- Strengthening our sustainability ambitions by anchoring Brighter Living Solutions into our mission and adding new business principles on low-carbon innovations and water security;
- Simplifying existing business principles by reducing the number of principles from 31 to 17; and
- Clearly outlining our aspired company culture, which is supported by the 'ONE DSM Culture Agenda' (see page 40) and the 'DSM Leadership Model' (see page 39).

Our corporate Strategy 2018: *Driving Profitable Growth* builds on this foundation. Additionally, we made the Code's e-learning course more user-friendly. It is shorter, customized for the main business functions and includes a simple refresher for long-term employees.

All DSM employees are expected to follow the Code, which is available in seven languages. The full text also appears on the company website. The Managing Board holds DSM's unit management accountable for compliance.



The DSM values training program contains several e-learning courses on these regulations for all employees or, for certain subject matter, target groups. In 2017, many e-learning were improved by providing shorter, more inspiring, and targeted content. When DSM acquires a business, integration and compliance plans are rolled out to make sure new employees are trained.

DSM's regulations cover the three dimensions of People, Planet and Profit, of which the most important are listed here:

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 incidents.

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.

The DSM Privacy Code for Employee Data and the DSM Privacy Code for Customer, Supplier and Business Partner Data prescribe mandatory training for Privacy Officers, HR employees, legal counsels and employees who regularly work with personal data. Anticipating the new European General

Data Protection Regulation that comes into force in 2018, privacy procedures were reviewed and adjusted in 2017. The corresponding Privacy e-learning was adjusted accordingly.

A Human Rights position paper is available on the company website. For more information, see 'Human rights' on page 41.

Planet: The Basic Course Responsible Care addresses the elements of the Responsible Care Program: Safety, Health, and Environment; Product Stewardship; Security and Sustainability.

Profit: DSM has e-learning for Global Competition Law Principles and Practices and Global Trade Controls. Compliance is embedded in DSM's systems and processes. 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 is shared with selected employees in commercial and business roles. When needed, we have translated this into local language to facilitate better understanding. For example, a Chinese translation of the DSM ABC Policy and Compliance Manual, an easy-to-use ABC checklist, and ABC classroom training are available (integrated into the Competition Law classroom program). The ABC due diligence program for agents and distributors was further implemented during 2017.

The Security e-learning covers DSM's seven Key Security Behaviors. To complete the e-learning, employees are required to read and sign off on the DSM Code of Conduct for Information Security.

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 where applicable, shares and related financial instruments in other companies. These apply to all relevant employees, including the Executive Committee, the Managing Board, and the Supervisory Board.

Value chain

The business principles most relevant to the supply chain are brought together in the Supplier Code of Conduct and are also 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, confirming their commitment to sustainability, among other things.

For distributor and agent contracts, the ABC Policy is being translated into terms and conditions that ensure ethical

business conduct when these parties act on behalf of DSM or deal with DSM products further down the value chain.

Training and awareness

Employees must regularly refresh their DSM values training. The implementation of this training program continues to progress well. In 2017, a new learning management system has been rolled out globally, see 'Learning & Development at DSM' on page 38. More than 2,000 employees previously using classroom training now have online access to all e-learning courses, greatly increasing efficiency.

At year-end, most employees had completed or refreshed their training (excluding employees of some recently acquired businesses). Certain elements of the program are offered to selected contractors as well as to employees in DSM's joint ventures.

A Review Team, chaired by the Vice President Corporate Risk Management, monitors implementation of the DSM values training program. This team also monitors internal and external developments around corporate ethics in order to promote and safeguard the company's values and reputation.

Employees for whom competition laws are most relevant must confirm their compliance with the rules set out 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 2017, no breaches were reported.

Even with training, sometimes employees may come across dilemmas when they put the Code into practice. Employees can request dilemma workshops to calibrate 'what is right' and 'what is wrong'. These workshops build on DSM's company culture, which is based on openness, fairness, and trust. This helps continuously improve business integrity in daily operations.

Letter of Representation

At the end of each year, the management of all 33 operational units 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 training, and DSM's corporate policies and requirements (see 'Risk management' on page 112).

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. Where this is not considered

appropriate, complaints are made directly to the DSM Alert Officer. In all cases, consequence management practices (e.g. official warning, temporary suspension, dismissal) are in place 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. Non-DSM employees wishing to voice a concern regarding violations of the Code can also contact the DSM Alert Officer via the company website.

In 2017, 24 Alert cases (reports of potential violations of the Code) were received, two of which were reported by an external person or party. This is at the same level as in previous years. There were two potential bribery and corruption cases reported. One case has been investigated, but the report could not be substantiated. The other case is still under investigation.

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, 36 employees were dismissed in 2017 because of breaches of the Code or other legal or local company regulations. In addition, 88 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 in 2016.

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.

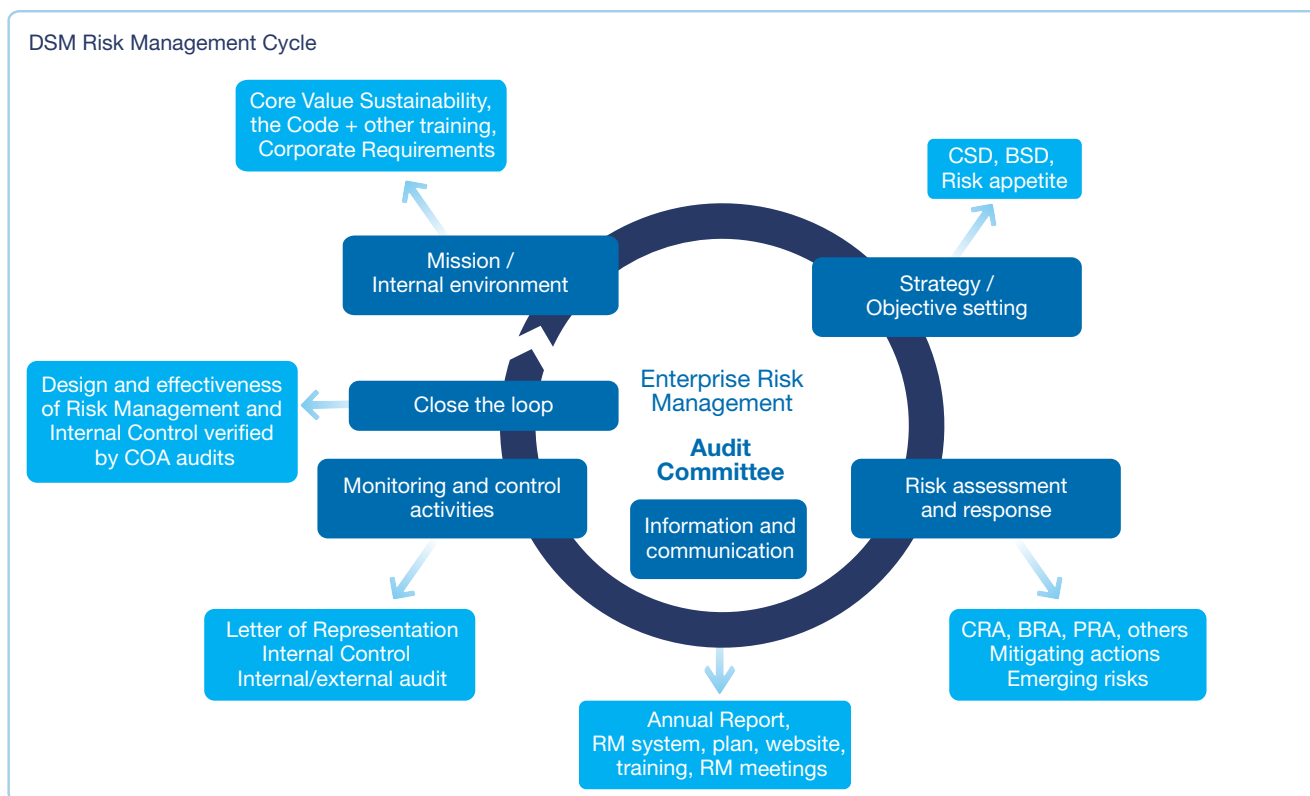
Planet: There was one violation of the Code reported in the Planet dimension in 2017 due to irresponsible behavior by an employee. This violation did not lead to a serious environmental incident.

Profit: Most of the cases that were reported in the Profit dimension were related to the incorrect registration of working hours, conflicts of interest and fraudulent expense claims.

Implementation of the DSM values	2017	2016
Training and awareness e-learning:		
% of targeted employees trained		
General		
- Code of Business Conduct	90%	97%
People		
- Life Saving Rules	97%	99%
- Unlawful Harassment Prevention	88%	98%
- Data Privacy Knowledge	96%	90%
Planet		
- Basic Course Responsible Care	100%	98%
Profit		
- Global Trade Controls	96%	92%
- Anti-Bribery and Corruption	98%	93%
- Security	96%	97%
DSM Competition Law:		
% of targeted employees signed off		
- DSM Competition Law compliance annual statement	99%	99%
Violations of the Code:		
Number of dismissals / other consequence management		
Triple P breakdown		
- People	28/79	20/58
- Planet	0/1	3/5
- Profit	8/8	9/13
Regional breakdown		
- Europe & Africa	18/21	13/31
- Americas	13/61	14/37
- Asia-Pacific	5/6	5/8
Total	36/88	32/76
Alert cases (whistleblower procedure):	24	24
Number substantiated / not substantiated / under investigation		
Triple P breakdown		
- People	1/9/2	11/10/0
- Planet	0/0/0	0/0/0
- Profit	3/7/2	2/1/0
Regional breakdown		
- Europe & Africa	2/4/2	2/2/0
- Americas	1/7/1	7/9/0
- Asia-Pacific	1/5/1	4/0/0
Total	4/16/4	13/11/0

Risk management

The Managing Board is accountable for risk management associated with DSM's strategy and activities. To that end, adequate risk management and internal control systems should be in place. The responsibility for identifying and managing risks lies within the DSM units, supported by the Corporate Risk Management (CRM) department and regularly assessed by the Corporate Operational Audit (COA) department both reporting directly to the CFO and COA having direct access to the CEO and the Audit Committee of the Supervisory Board.



The Managing Board has in place a well-embedded risk management, internal control system and organization in all company units. The approach is based on the COSO-ERM framework¹. This chapter is structured accordingly (see figure 'DSM Risk Management Cycle').

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.

It is the responsibility of the business groups, support functions, functional excellence departments and regions (the units) within DSM to set up, maintain, operate and monitor an appropriate risk management and internal control system within their area of responsibility. This responsibility includes the management, monitoring, reporting and controlling of risks. The units are supported in this by risk managers. COA closes the loop with regular assessments of the design and operational effectiveness of the risk management and internal control systems.

Mission / Internal environment

Values and business principles are key elements of the internal environment for risk management and form the starting point of the risk management cycle. DSM's core value is sustainability, which is directly related to the company's mission to create brighter lives for people today and generations to come. All DSM employees receive regular training on values and business principles per the framework requirements. This starts with overarching training on the DSM Code of Business Conduct.

In 2017, DSM introduced a new global risk management operating model to improve the agility, effectiveness and efficiency of its risk management activities. Risk managers will have dual reporting lines:

- A functional reporting line to guarantee the quality of risk management and continuous improvement
- Business reporting lines to safeguard close connection to business goals and operations

¹ Committee of Sponsoring Organizations of the Treadway Commission Enterprise Risk Management-Integrated Framework.

We have made it easier for employees to follow DSM's Corporate Requirements by clearly communicating who exactly needs to understand and adhere to specific requirements. This included updates to our risk management website, which was improved in 2017.

Strategy / Objective setting

DSM's Corporate Risk Management supports the Executive Committee, business groups, and functions at the global and regional levels to deliver on the company's strategy.

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

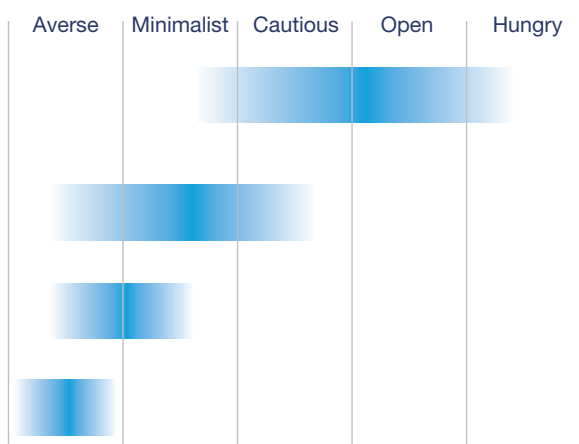
(e.g.: Reputation, Customer, Project management, Production process, (Information-) Security, Business continuity, Product liability, Safety, Health and Environment)

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 assessments and mitigation plans are carried out at various levels in the organization. DSM has a standard but flexible, six-step approach to risk assessments:

- Preparation
- Identification
- Analysis
- Evaluation
- Treatment
- Monitoring and reviewing

Risk assessments focus on various categories including material, non-material and reputational risks. In 2017, we identified additional opportunities for improving how we facilitate, challenge, define and monitor mitigation efforts. As a result, we will also update the risk assessment training program.

Corporate Risk Assessment

DSM conducts a Corporate Risk Assessment (CRA), which is the responsibility of the Managing Board. As part of the assessment, the Executive Committee reviews and agrees on top risks facing DSM, as well as emerging and other important risks. They also agree on how to mitigate and monitor these. The outcome of the CRA is reported to, and discussed with,

Risk assessment and response

An important precursor to risk assessments is the company's overall risk appetite, which is defined and updated annually by the Executive Committee. In 2017, the overall risk appetite has remained the same as in the previous year (see figure below).

the Audit Committee of the Supervisory Board annually (see table of top risks on page 115).

Business Risk Assessments

DSM's business groups also conduct assessments. Business Risk Assessments (BRAs) and their equivalents for business units, functions and regions are carried out with cross-functional teams. These include experienced facilitators as well as experts who can challenge assumptions to help improve the quality of these risk assessments.

Process Risk Assessments

DSM conducts Process Risk Assessments (PRAs) which are intended to make our processes as robust, business-specific and fraud-proof as possible.

Project Risk Assessments

At the project level, risk assessments are performed on an ongoing basis to secure successful delivery of project objectives and value creation for the company.

Monitoring activities

DSM has various means of monitoring and related reporting. These include monitoring of events, Letters of Representation (LoR), external/internal audits, compliance checks, and

functioning of the common controls. Monitoring and reporting is discussed in risk management committees in order to evaluate and manage the status of the risk profile.

The most important types of risks for DSM's units, as well as any incidents, are annually reported and reviewed mid-year through the LoR, which all reporting units are required to sign. This 'bottom-up' report is checked against the risks reported by the CRA, as well as with the findings from the internal and external audits.

DSM's risk managers also support internal audits to check the effectiveness of the internal controls, compliance status and risk mitigations, and incident repairs.

The consolidated overview of all aforementioned monitoring is the basis for this risk section and the statements of the Managing Board at the end of this section.

Control activities

Control activities are carried out by appointed unit risk managers and unit risk management committees, who regularly review:

- compliance with training implementation, segregation of duties, and follow-up of audits of various stakeholders;
- 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 awareness and relevant training for DSM employees.

During 2017, DSM implemented a standard approach to monitoring ERP access controls, user provisioning and privileged user management for the majority of the company's units. DSM started to bring relevant key controls for its main supporting processes into an overarching Internal Control Framework. Relevant function leads are currently mapping their key controls, and this will enable DSM and its stakeholders to have a comprehensive oversight of all Internal Controls in scope. A pilot, as proof of concept, is planned for 2018.

Information and communication

Continuous efforts are made to inform employees about the DSM risk management system and to support and/or train

them in its use. In addition to the many initiatives from 2016, the main deliverable in 2017 was the further development, improvement and updating of the risk management training curriculum and the risk management training program.

Assessment of the design and effectiveness of the risk management and internal control system

DSM has three lines of defense to manage risks:

- Line management within the units
- Risk management and internal control (on unit and corporate level)
- COA

The effectiveness of the risk management activities by the first line of defense is assessed by internal audits, coordinated by the risk managers of the units being the second line of defense.

In addition to that, independent audits, some unannounced, are conducted by COA (third line of defense) in a program that was agreed with the Executive Committee and the Audit Committee of the Supervisory Board.

The 2017 internal audits have not indicated any material failings in the design and effectiveness of the internal risk management and control systems of the company.

Risks

The preliminary outcome of the CRA was reported to and discussed with the Audit Committee of the Supervisory Board in the meeting of December 2017. This 'top-down' outcome corresponded very well with the 'bottom-up' risks and incidents as reported by all the individual units in their Letter of Representation, 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 of the Supervisory Board in February 2018 and forms the basis for the main risks and responses as reported in the table.

Top risks

The table on the next page shows the four most important risks that might prevent DSM achieving the targets defined in Strategy 2018: *Driving Profitable Growth*. It also describes the mitigating actions. Top risks have a potential impact on DSM's EBITDA of an indicative €30 million or more, or have a large non-financial impact such as on reputation.

Top risks and related mitigating actions

Description of risks	Mitigating actions
<p>Market environment and competition</p> <p>DSM has created a streamlined and simplified business portfolio and a good platform for growth, as 2017's results have shown. Nonetheless the risk remains of facing increased competition for some product-market combinations, especially from low cost/margin players, while DSM actively needs to also manage capacity expansions for selected products.</p>	<p>The existing strength of the portfolio, as a result of continued investments made in innovation, has resulted in a broadening of DSM's product, application and customer base. Nonetheless, improvements to marketing and sales management programs (customer centricity, agility) will continue to increase/protect the value captured, while the company plans timely capacity expansions and/or external sourcing to manage growth. Operational continuous improvement programs also secure maximum output from existing installations.</p>
<p>People, organization and culture</p> <p>In order to continue to deliver above-market growth and retain strong operational efficiency, DSM requires a high-quality pipeline for talents and good people development. Although good progress has been made with the introduction of a new talent management program, further improvements may be required to fully embed a culture of agility and cost-consciousness to support the organization in its growth ambitions.</p>	<p>DSM has adjusted its operating model and has strengthened its top leadership to enhance accountability for performance. All executives attended in 2017 a specifically designed 'Lead & Grow' leadership program focused on managing rapid change and uncertain business conditions. The monitoring of progress in the talent pipeline will continue focusing on the need to further enhance diversity.</p>
<p>Operating in a digital world</p> <p>Despite a good track record and having procedural and system controls in place, cyber crime constantly needs attention to protect our assets and information. This risk is exacerbated by the accelerating pace of digitalization. In addition, if DSM does not progress fast enough, delays in digitalization is in itself a risk, impacting future competitiveness.</p>	<p>DSM is strengthening its governance structure around cyber security, with particular attention to production plants and R&D laboratory systems. Monitoring to detect security incidents and incident response is in place. The company is also accelerating the deployment of digital initiatives following a full IT and digital transformation that took place in 2017, with the view to embed a digital mindset in all parts of the organization.</p>
<p>Product portfolio and innovation-driven growth</p> <p>The quality and relevance of the current DSM portfolio of products is fully reflected in the above-market growth rates achieved in all businesses. To sustain this strong market position DSM is investing in innovations for which the time to market is uncertain. Delays in key projects constitute a risk to mid-term sustainable growth and the company's ability to maintain highly relevant product offerings.</p>	<p>Product portfolio management has led to more focus in terms of capital allocation and project prioritization. Top projects are closely monitored, with a well-established stage-gate approach and regular status reviews with the Executive Committee. Where possible, time-to-market is shortened via customer and/or innovation alliances.</p>

The top risks as defined in 2017 relate largely to the same topics as those identified in 2016. The main changes versus 2016 are:

- Although still a risk, 'Geopolitical, global financial and economic developments' has dropped out of the top risks list as the global economic outlook has improved compared to 2016 and related mitigation actions such as geographical diversification are working.
- The risk of 'Program and Project Management' has decreased and is not a top risk anymore due to the good progress made in 2017 on the cost reduction and productivity improvement programs.
- The existing 2016 risks related to operating in a digital world have increased and are now combined into a top risk.
- The 2016 emerging risk relating to some longer-term DSM Innovation projects is now reflected in the top risk 'Product portfolio and innovation driven growth'.

Emerging risks

The following two emerging risks have been identified by the Executive Committee. They are being carefully monitored so that DSM can take action or use them as new opportunities in a timely manner.

1. DSM's Nutrition and Materials markets may be disrupted by longer-term changes such as:

- new food preferences / food systems;
- potential impact of climate and health trends on animal protein;
- innovations such as 3D printing;
- replacing fossil fuels by energy from renewable sources; and
- new mobility and transport options.

This could create a risk if the speed of change in the world is higher than DSM's speed of adaptation to it.

2. DSM may not be able to adjust its environmental footprint or respond to climate change related disruption in its end-markets fast enough.

At the same time, these two emerging risks will also offer new opportunities for DSM's Brighter Living Solutions.

Other important risks

Besides the top risks reported in the previous table and other emerging risks that need to be taken into account, the CRA has identified some other important (sometimes more operational) risks. These include business continuity, product liability, intellectual property and tax risks. The company's risk management and internal control system has been designed to monitor and respond to the maximum extent possible.

Enhancement of the risk management system

During 2017, considerable effort was spent on the development and design of a new global risk management operating model, including dual reporting lines for risk managers to ensure quality of risk management and close connection to business goals and operations. Implementation started in January 2018.

Other improvements to the risk management framework:

- Long-term value creation and the company culture we aspire has been included in the update of the Code, in line with the Dutch Corporate Governance Code.
- Further simplification of several Corporate Requirements, the Code, the corresponding training program (shorter, more inspiring, and targeted content in e-learning) and a new global learning management system has significantly increased the efficiency of risk management.
- A project to update our Internal Control Framework has been started because of changes in DSM's portfolio, redesign of operating models, audit findings and the update of the Dutch Corporate Governance Code.

As a standard practice, the Audit Committee of the Supervisory Board was given in-depth insight into the status of the DSM risk management system. This ensured that this committee remained fully involved and aware of the status of, and developments in, enterprise risk management and how this has the potential to help achieve DSM's strategic objectives.

Statements of the Managing Board

The Managing Board is responsible for the design and operation of the internal risk management and control systems. In discharging this responsibility, the Managing Board has made a systematic assessment of the effectiveness of the design and operation of the internal control and risk management systems.

On the basis of this report and in accordance with best practice 1.4.3 of the Dutch Corporate Governance Code of December 2016, and Article 5:25c of the Financial Supervision Act, the aforementioned assessment and the current state of affairs, to the best of its knowledge and belief, the Managing Board confirms that:

- the internal risk management and control systems of the company provide reasonable assurance that financial reporting does not contain any material inaccuracies;
- there have been no material failings in the effectiveness of the internal risk management and control systems of the company;
- there are no material risks or uncertainties that could reasonably be expected to have a material adverse effect on the continuity of DSM's operations in the coming twelve months; and
- there is a reasonable expectation that DSM will be able to continue its operations and meet its liabilities for at least twelve months, therefore it is appropriate to adopt the going concern basis in preparing the financial reporting.

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. Nor can they provide certainty that we will achieve our objectives.

In view of all of the above, the Managing Board confirms that, to the best of its knowledge and belief, the financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the company, and that 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, 27 February 2018

[The Managing Board](#)

Feike Sijbesma, CEO/Chairman Managing Board
Geraldine Matchett, CFO
Dimitri de Vreeze

Report by the Supervisory Board

Introduction by the Chairman

“ Our focus during 2016 had been on delivery, and we fully maintained this in 2017, with positive results on many fronts. ”

Rob Routs, Chairman Supervisory Board

For DSM, 2017 was again a year of strong delivery. DSM exceeded the targets set out in Strategy 2018: *Driving Profitable Growth*. The strong focus on delivery that we witnessed in 2016 continued in 2017 and is now clearly anchored throughout the company.

We also successfully divested our remaining stake in Patheon bringing total cash proceeds at about €2 billion, demonstrating our commitment to monetize the significant value within our associates.

Being well ahead of the ambitions of Strategy 2018 and having received the significant cash proceeds of Patheon earlier than anticipated, the Supervisory Board fully supports the Managing Board's intention to accelerate the regular strategy review process for the period beyond 2018, while remaining firmly in delivery mode.

During the second half of 2017, the Supervisory Board dedicated several sessions to this strategy review process, discussing also how to maintain the company's current growth momentum and fully leverage the results of recent improvement programs and investments in talent development.

Safety has been the subject of serious discussion. There was a tragic fatal accident at one of our plants in the US in 2017, which came as a great shock. The Supervisory Board pays close attention to both personal and process safety; these have been recurring topics at our meetings. We remain committed to the safety of all employees and contractors and our goal is for DSM to be an incident- and injury-free company.

DSM continued to deliver well on its ambitious sustainability goals as part of Strategy 2018. Sustainability is our core value and a key business driver for the growth of the company.

Not only do we reduce our own environmental footprint and enable our customers to do the same with our innovative solutions, we also advocate on the issues that define our times. DSM continues to be a positive voice, shaping

discussions with organizations like the CEO Climate Ambassadors of the World Economic Forum, the Carbon Pricing Leadership Coalition (CPLC, convened by the World Bank, supported by the UN, IMF and OECD) and We Mean Business.

Our CEO Feike Sijbesma showed great leadership in this area during 2017 especially regarding advocacy on climate action. In recognition of the substantial role he played in supporting the Paris Agreement (COP21) and in many other climate-related negotiations and meetings since that historic agreement, Mr. Sijbesma was invited to be an official speaker and share the stage with heads of state at the One Planet Summit organized by French President Macron in December. During the summit, many countries announced the introduction of carbon pricing — a significant breakthrough for Mr. Sijbesma who co-chairs the Carbon Pricing Leadership Coalition together with Mrs. Catherine McKenna, the Canadian Minister of Environment.

This year, the site visits of the Supervisory Board took place in the US, where we visited a range of different businesses across DSM including DSM Venturing, i-Health, DSM Biomedical, DSM-POET and DSM-Niaga. The US visit helped my colleagues on the Supervisory Board to deepen their understanding of some of the smaller businesses within DSM, their various business models, and respective growth and innovation opportunities. It also allowed us to interact with management and other talent in North America.

Overall, 2017 was a very good year for DSM. On behalf of my colleagues on the Supervisory Board, I would like to thank our employees and DSM's leadership for their hard work and commitment. I would also like to thank the many stakeholders who continue to place their trust in DSM.



Supervisory Board Report

This Report provides further information on the way the Supervisory Board performed its duties in 2017. This concerns 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 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 in line with that performance and that it provides the appropriate incentives. Since the inception of an Executive Committee, the Supervisory Board has also been responsible for ensuring that the checks and balances that are part of the two-tier system are still taken into account, paying specific attention to the dynamics between the Managing Board and the Executive Committee.

The responsibility of supervising the policy pursued by the Managing Board includes evaluating the way the Managing Board implements DSM's strategy for long-term value creation, and promotes a culture aimed at that value. Since the company's mission is to create brighter lives for people today and generations to come, long-term value creation is embedded both in DSM's Strategy 2018: *Driving Profitable Growth* and in the company culture. This is described in the chapters 'Strategy' on page 18, 'People' on page 34 and 'Corporate governance' on page 101.

Composition of the Supervisory Board

The composition of the DSM Supervisory Board is diverse in gender, nationality, background, knowledge and experience. There are five men and three women. Three members are Dutch, two American, one Dutch-American, one British and one Singaporean. The Board's current members are Rob Routs (Chairman), Tom de Swaan (Vice Chair), Victoria Haynes, Eileen Kennedy, Pauline van der Meer Mohr, Frits van Paasschen, Pradeep Pant and John Ramsay. For detailed information on their backgrounds, see 'Corporate Governance' on the company website and page 130 of this Report.

Following best practice 2.1.10 of the Dutch Corporate Governance Code, the Supervisory Board establishes that its members are able to act critically and independently of one another, the Managing Board and any particular interests involved. To safeguard this, the Supervisory Board is composed in such a way that all its members are independent in the meaning of best practice 2.1.8 of the Dutch Corporate Governance Code.

The targeted profile of the Supervisory Board is reflected in its regulation, which is 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'.

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 2017, this was the case with respect to the revision of the Dutch Corporate Governance Code, the Clean Cow and Green Ocean projects, the achievement of DSM's Group Sourcing function, the progress of the POET-DSM joint venture, talent development, and IT and cyber security. During its annual site visit, the Supervisory Board actively takes the opportunity to interact with employees at different levels within the company, from the shop floor to senior leadership, thus collecting valuable information and insights from various 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 regular close contact with the CEO/Chairman of the Managing Board, as is the Chairman of the Audit Committee with the CFO.

Furthermore, the Supervisory Board regularly interacts with members of the Executive Committee who attend parts of Supervisory Board meetings and participate in elements of the yearly site visit of the Supervisory Board that are relevant to their specific area of responsibility.

The Supervisory Board interacts with DSM employees on various occasions and in various settings. Direct, one-on-one contact between Supervisory Board members and Managing Board members generally follows naturally from topics discussed in the Supervisory Board meetings and matches the members' 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 contact with other employees. For example, Supervisory Board member Pradeep Pant, has extensive knowledge of Asian markets, and is in regular contact with our senior management in that region. In another example, Supervisory Board member Pauline van der Meer Mohr, who has a clear HR profile, was one of the keynote speakers at an internal DSM event about mentoring. The Chairman of the Sustainability Committee, Eileen Kennedy, attended one of the meetings of DSM's Sustainability Advisory Board. Our new members John Ramsay and Frits van Paasschen had

numerous one-on-one meetings and visited several sites as part of their introduction program.

The Supervisory Board has an active interest in maintaining a good understanding of DSM's stakeholders and their positions on various topics related to the company's areas of

business. This includes shareholders' perceptions. 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.

Meeting attendance of the DSM Supervisory Board

Member	Supervisory ¹ Board meetings	Audit Committee meetings	Nomination Committee meetings	Remuneration Committee meetings	Sustainability Committee meetings
Rob Routs (Chairman)	100%	n.a. ²	100%	100%	n.a. ²
Tom de Swaan (Deputy Chairman)	100%	100%	n.a.	100%	n.a.
Victoria Haynes	86% ³	100%	n.a.	100%	n.a.
Pierre Hochuli ⁴	100%	100%	n.a.	n.a.	100%
Eileen Kennedy	86% ³	n.a.	100%	n.a.	100%
Pauline van der Meer Mohr	100%	n.a.	100%	100%	n.a.
Frits van Paasschen ⁴	100%	n.a.	100%	100%	n.a.
Pradeep Pant	100%	100%	n.a.	n.a.	100%
John Ramsay ⁴	100%	100%	n.a.	n.a.	n.a.

¹ Attendance is reflected for the seven Supervisory Board meetings held in 2017. In three out of the four additional Supervisory Board calls that were also held in 2017 the decision making had been delegated by the Supervisory Board to the Chair of the Board and the Chair of the Audit Committee, who both attended all the calls. During the fourth additional Supervisory Board call, that pertained to the mandate to acquire Amyris Brasil Ltda and establish a long-term manufacturing partnership for Amyris' high-volume products, Eileen Kennedy and Pauline van der Meer Mohr were unable to attend due to prior commitments and the short notice at which this call had to be planned.

² The Chair has a standing invitation and has attended 100% of the meetings.

³ Victoria Haynes had to miss the additional, seventh Supervisory Board meeting which was planned in the course of 2017 following the decision to bring forward the regular strategy review process. That meeting conflicted with a prior commitment of Victoria Haynes. Due to very bad weather circumstances Eileen Kennedy could not travel nor dial in to one of the Supervisory Board meetings.

⁴ Pierre Hochuli retired as member of the Supervisory Board as from the 2017 General Meeting of Shareholders. Frits van Paasschen and John Ramsay became members of the Supervisory Board following their appointment at the 2017 General Meeting of Shareholders.

Supervision and advice

The Supervisory Board performs its duties of supervising and advising the Managing Board with respect to both recurring standard agenda items for Supervisory Board meetings and 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 DSM's financial performance, approves the annual Finance Plan, and deliberates on any additional treasury topics as needed. In 2017, the Supervisory Board discussed and approved the share buy-back program to cover the company's commitments under existing management and employee option plans and its stock dividend policy. With input from the Audit Committee, the Supervisory Board also discussed DSM's policy for foreign exchange risk management. Furthermore, the amendment of the dividend arrangements of DSM's cumulative preference shares A was discussed with the Supervisory Board prior to the 2017 General Meeting of Shareholders, where this amendment was approved.

In 2017, the Supervisory Board was actively involved in DSM's strategy review process including the assessment as to the extent DSM is on track with the execution of Strategy 2018. Working sessions were held to identify relevant trends, risks and opportunities as input for the strategy review process. DSM's approach to the opportunities and threats presented by the 'digital revolution' as expressed in the Digital Strategy were reviewed together with the 'digital aiming points' that set out measurable goals to be achieved through the application of digital technologies in the coming years.

Site visits

Each year, the Supervisory Board takes a number of days to visit DSM sites in a particular region. This fosters interaction with employees across different areas of the company and provides Supervisory Board members with opportunities for continuing education. This year's visit took the Supervisory Board to North America.



The DSM Supervisory Board (from left to right): John Ramsay, Frits van Paasschen, Pauline van der Meer Mohr, Tom de Swaan (Deputy Chairman), Victoria Haynes, Rob Routs (Chairman), Eileen Kennedy, Pradeep Pant.

Whereas in 2016 the site visit was designed in such a way that the Supervisory Board followed the manufacturing chain of DSM Nutritional Products in Switzerland, the site visit of 2017 gave an overview of a wide range of different businesses and activities in North America. The visit to North America deepened the Board's understanding of several of the company's smaller businesses, such as i-Health and DSM Biomedical, offering additional insights into their business models, growth potential and innovation opportunities.

The North America visit began with a general overview of DSM's business in the region as well as relevant political and economic developments. The Board then received an update on Venturing, a small team operating as part of DSM's Innovation Center in North America. DSM Venturing takes minority investments in start-ups, creating opportunities for DSM's businesses.

The Supervisory Board were briefed in-depth on two specific business models within DSM — the i-Health business and the DSM-Niaga joint venture. Given the importance of customer-centricity, the briefing on DSM-Niaga was combined with a presentation by and discussion with representatives of Mohawk, the second-largest flooring maker in the US. Under the brand name Air.o™, Mohawk sells recyclable carpets made from DSM-Niaga material.

During the North America visit, the Supervisory Board traveled to two facilities. The first was DSM's Biomedical facility in Exton (Pennsylvania, USA). The visit to Exton provided insights into the technologies applied and the innovation opportunities of DSM Biomedical, the largest of the company's three Emerging Business Areas. The second visit was to the Advanced Biofuels facility of the POET-DSM joint venture in Emmetsburg (Iowa, USA). This visit included interactions with employees and with DSM's North American leadership, as well as participation in a townhall meeting. The townhall meeting was broadcast live across all DSM's North American sites.

Finally, time was taken to reflect on the site visit, with the participating Executive Committee members. Supervisory Board members shared their impressions and offered specific advice pertaining to the applied business models, technologies and the talent development process.

In December, the Supervisory Board also visited the Rosalind Franklin Laboratory in Delft (Netherlands) and learned more about the biotechnology capabilities of DSM.

Supervisory Board meetings and performance evaluation

In 2017, the Supervisory Board held its six regular meetings in the presence of the Managing Board, as well as one additional meeting in the presence of the Managing Board, in order to be able to dedicate sufficient time to the strategy review process. The Supervisory Board also held four additional conference calls. These were held to assess the procedure carried out between the publication of DSM's full-year results 2016 and the publication of its 2016 financial statements; to approve the external auditor's fee for 2018; to approve the amendment of the Articles of Association to adjust the way the dividend percentage on the cumulative preference shares A is calculated; and, finally, to give a mandate for the divestment of Patheon and for the acquisition of Amyris Brasil Ltda. Information on attendance of Board and Committee meetings can be found on page 120.

The Supervisory Board also convenes in the absence of the Managing Board, which usually happens before each meeting.

An evaluation of the Supervisory Board is performed once every three years by an external advisor; this was the case in 2016. In the other two years, the evaluation of the Supervisory Board is performed by means of a self-assessment consisting of a written questionnaire, followed by in-depth, one-on-one interviews between the Chairman and individual Supervisory Board members.

As part of this evaluation, not only the collective performance of the Supervisory Board and its Committees, but also that of individual Supervisory Board members, was evaluated and received feedback in the interviews conducted by the Chairman. Furthermore, the Vice Chair interacted with all Supervisory Board members to assess the performance of the Chairman. The outcome of the evaluation was presented to, and discussed with, the Supervisory Board in December, in the absence of the Managing Board. While the Managing Board's performance is also assessed as part of the evaluation, this happens throughout the year as part of the discussions on succession planning in the Nomination Committee, and particularly when the performance appraisals of the Managing Board members are discussed. The Nomination Committee reports back on these discussions to the full Board.

The overall feedback from the evaluation in 2017 was that the Supervisory Board members work well together, and that discussions are open and candid. The diversity of thinking within the Supervisory Board and the willingness to engage and challenge within the Supervisory Board and between Supervisory Board and Managing Board are much appreciated. The composition of the Supervisory Board is viewed as balanced, and also its size of seven to eight members works well. Key areas of strategy, business performance and risk management are well covered. Although

already dealt with regularly, the Supervisory Board would be pleased to spend even more time on major market developments, DSM's external operating environment, and lessons learned from major investments and acquisitions.

Committees

The Supervisory Board has four committees to cover key areas in greater detail: nominations, remuneration, sustainability, and auditing. These are described in more detail below.

Board nominations

Members of the Nomination Committee are Rob Routs (Chairman), Eileen Kennedy and Pauline van der Meer Mohr. Feike Sijbesma and Peter Vrijzen, Executive Vice President Group People & Organization, were also involved in the discussions of the Committee. As of October 2017, Judith Wiese, who succeeded Peter Vrijzen as of 1 January 2018 participated as part of her on-boarding. The Committee met five times in 2017. 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. The Supervisory Board also has access to all the meeting materials posted for the Nomination Committee meetings.

In 2017, 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 Geraldine Matchett, whose first term as Managing Board member will end in 2018. The nomination for reappointment was fully endorsed by the Supervisory Board. The Supervisory Board concluded that DSM greatly benefitted from Mrs. Matchett's first tenure on the Managing Board, her qualities as a well-rounded and international CFO, and her extensive experience with external stakeholders.

The Supervisory Board established that the composition of the Managing Board is diverse in nationality (with two Dutch citizens, and one member with joint Swiss, British and French citizenship), gender (two men, one woman), background, knowledge and experience, and that it provides a good foundation to support all clusters and business groups in achieving their targets and thus to contributing to the company strategy to drive profitable growth. For detailed background information on all Managing Board members, see the company website under 'Corporate Governance' and page 131 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 succession planning for the Supervisory Board. It concluded that no specific profile is currently lacking within the Board. With Tom de Swaan reaching the maximum tenure as a member of the Supervisory Board (with effect from the 2018 Annual General Meeting of Shareholders), John Ramsay was appointed at the Annual General Meeting of Shareholders of 2017 to ensure a smooth transfer of the chairmanship of the Audit Committee in particular. Based on the advice of the Nomination Committee, the Supervisory Board also agreed to nominate Rob Routs for reappointment to the 2018 General Meeting of Shareholders for a two-year term. This nomination for reappointment is founded on his extensive international experience, his knowledge of the petrochemical industry, his broad experience in the management of corporations, and his qualities as Chairman of DSM's Supervisory Board, as demonstrated during the past eight years. The on-going regular strategic review and the fact that the Vice Chair will be stepping down with effect from the 2018 Annual General Meeting are additional reasons to safeguard continuity in the Chairman's role, especially given the much-valued way in which Rob Routs has fulfilled this role.

Board remuneration

The Remuneration Committee had five meetings and one conference call in 2017. Pauline van der Meer Mohr (Chairman), 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. The Supervisory Board also has access to all the meeting materials posted for the Remuneration Committee meetings. For more information on the remuneration policy see 'Remuneration policy of the Managing Board' on page 125 and implementation of that policy in 2017, see 'Remuneration of Managing Board and Supervisory Board' on page 222.

Discussions were focused on the performance and the related remuneration of the members of the Managing Board, in respect of both company and individual performance in 2017, as well as concerning the way the current remuneration policy should be applied, given the targets set as part of Strategy 2018: *Driving Profitable Growth*. The performance and remuneration of the Executive Committee members were also discussed with the Remuneration Committee. Feike Sijbesma and Peter Vrijzen were also partly involved in these discussions, and, as of October 2017, so was Judith Wiese, as part of her on-boarding. Mrs. Wiese succeeded Peter Vrijzen as of 1 January 2018.

Sustainability

The Sustainability Committee prepares the Supervisory Board's discussions on sustainability topics. The Sustainability Committee met three times in 2017. This Committee

comprises Eileen Kennedy (Chairman), Pierre Hochuli (until the Annual General Meeting of 2017), Pradeep Pant and, as of the Annual General Meeting of 2017, Frits van Paasschen. The Chairman 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. The Supervisory Board also has access to all the meeting materials posted for the Sustainability Committee meetings. The feedback from the Committee to the full Board included advice and recommendations regarding topics to be approved by the Supervisory Board, in particular the sustainability reporting in this Report. Taking into consideration the 'Assurance report of the independent auditor' on the sustainability information' by KPMG on page 234 of this Report, the full Supervisory Board approved the reporting in these sections in its meeting on 27 February 2018. The Sustainability Information complies 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 was 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 several topics. One of them was the way DSM monitors and manages possible issues that can arise with DSM products. As an example, DSM's positioning on industrial biotechnology was discussed with the Committee. Another in-depth discussion took place on the Brighter Living Solutions, specifically, on the way this key performance indicator is impacted by new innovations entering the market and the effect of product / market mix performance fluctuations caused by changing markets and changing mainstream reference solutions. Time was also spent discussing the actions being undertaken to further future-proof DSM by reducing the company's climate impact and climate risk exposure, by enabling a low-carbon economy, and by advocating action externally and internally.

Furthermore, the Committee was updated on DSM's performance in the various Environmental, Social and Governance indices such as CDP, Sustainalytics, Fortune's 'Change the World' list and the Dow Jones Sustainability World Index.

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 five times in 2017, of which three times via conference call. Tom de Swaan (Chairman), Victoria Haynes,

Pierre Hochuli until the 2017 Annual General Meeting, Pradeep Pant, and, both as of the 2017 Annual General Meeting, John Ramsay and Frits van Paasschen are members of the Audit Committee. All Supervisory Board members have a standing invitation to attend Audit Committee meetings; in 2017, they used this standing invitation for the regular conference calls in which the financial developments and interim results for the first and third quarter were discussed, as these are not followed by a full Board meeting. The Chairman of the Supervisory Board participated in all meetings and calls. Whenever relevant, managers responsible for corporate control, internal audit, risk management and compliance were invited to explain developments in their areas to the Audit Committee.

DSM's external auditor KPMG and the CFO also participated in the Audit Committee's meetings and calls. The CEO participated in the Audit Committee meetings and the call in which the half-year results were discussed. 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 2017. 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. All Supervisory Board members also have access to all the meeting materials posted for the Audit Committee meetings.

The Committee had in-depth discussions on the company's financials; the financing and guarantee plan; the capital expenditure plan; dividend proposals; the 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 COA, including the endorsement of its proposed audit plan for 2018, which was subsequently approved by the full Board. 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), fraud cases, and on-going litigation. All these discussions included mitigating actions to prevent recurrence. Discussions were held with KPMG about the management letter, the audit report and the financial statements for 2017. In 2017, the Audit Committee formally evaluated the external auditor, and discussed the reappointment of KPMG. Other specific topics addressed during the Audit Committee meetings in 2017 were cyber security, DSM's foreign exchange risk management, and the foundation for the broadened in-control statement included on page 117 of this Report.

Financial statements 2017

The Report by the Managing Board and the financial statements for 2017 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 27 February 2018. The financial statements were audited by KPMG, who issued an unqualified opinion, see the 'Independent auditor's report' on page 229. The Supervisory Board established that the external auditor was independent of DSM.

The Supervisory Board will submit the 2017 financial statements to the 2018 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 this Report, starting on page 52.

Remuneration policy for the Managing Board

This chapter outlines the remuneration policy as approved by the Annual General Meeting of Shareholders in 2013. Details of the actual remuneration in 2017 as prepared by the Remuneration Committee and approved by the Supervisory Board can be found in Note 13 of the 'Parent company financial statements' on page 222. Every year the Supervisory Board elucidates the recent remuneration developments at the Annual General Shareholders Meeting.

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 to achieve its strategic and operational objectives, with the right organizational set-up, 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 sets a clear strategic direction and executes this with agility. DSM strives for high financial performance, as well as 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 their size and complexity.
- The remuneration policies for the members of the Managing Board and for other Executive Committee members, as well as for 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 the 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 2017

There were no adjustments to DSM's remuneration policy in 2017. 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 plus – for STI only – individual targets. The policy will be reviewed again in 2018, to be presented at the Annual General Meeting of Shareholders in 2019.

Labor-market peer group

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 the complexity of their business portfolio. The Supervisory Board regularly reviews this peer group to ensure that its composition is still appropriate. This review was conducted in the fourth quarter of 2017 and did not lead to a change in the current composition of DSM's labor-market peer group.

The labor-market peer group for 2017 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 the fourth quarter of 2017. DSM aims to offer 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 predetermined peer group (first, 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 between first quartile and median level.

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, 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, Managing Board members receive a base salary approaching 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 taking into account the 'general increase' (market movement) for DSM executives in the Netherlands, as well as the general movements of the labor-market peer group. Adjustment of the base salary is at the discretion of the Supervisory Board. In July 2017, a salary increase of 2.2% was granted to the CEO, and an increase of 2.5% to the other Managing Board members.

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 (partly also financial) 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 'Explanation of concepts and ratios' on page 240 and 'People' on page 34.

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 (three 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 the 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 these 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 13 of the 'Parent company financial statements' on page 222.

Mandatory and voluntary deferral of STI

A mandatory proportion (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.
- **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 (CO₂), methane, nitrous oxide (N₂O), 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 CO₂ (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 2017 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 which DSM's 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.

EEl as a performance measure

EEl 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 DSM GHGE reduction in shares that vest	% 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 EEl targets and vesting schemes are not 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 for 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.

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 that 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, 27 February 2018

The Supervisory Board

Rob Routs, Chairman
Tom de Swaan, Deputy Chairman
Victoria Haynes
Eileen Kennedy
Pauline van der Meer Mohr
Frits van Paasschen
Pradeep Pant
John Ramsay

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 (Chair), 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 (Chair), Remuneration Committee (member). Last executive position held: member Managing Board and CFO/CRO ABN AMRO. Supervisory directorships/other positions: Chairman Board of Zurich Insurance Group; Chairman Board of Trustees of Netherlands Cancer Institute-Antoni van Leeuwenhoek Hospital; Chairman of the Board of the Dutch National Opera & Ballet Fund.



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 of the Research Triangle Institute International. Supervisory directorships/other positions: member Board of Directors of PPG and Nucor.



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 plc.; member Supervisory Board of ASML N.V.; Chair Supervisory Board of EY Netherlands; director Hollandsche Maatschappij van Wetenschappen; Chair Board of Trustees Nederlands Danstheater and member of the selection and nomination committee of the Supreme Court of the Netherlands.



Frits Dirk van Paasschen (1961, m)

First appointed: 2017. End of current term: 2021. Nationality: Dutch and American. Audit Committee (member), Sustainability Committee (member). Last position held: CEO Starwood Hotels and Resorts. Supervisory directorships/other positions: Chairman Supervisory Board Apollo Hotels (NL), non-executive board member Williams Sonoma (US), non-executive board member Convene (real estate enhancement company) (August 2017) member Board of Advisors Rutberg & Company (US), CEO and Founder, The Disruptor's Feast Advisory, Advisor to CitizenM Hotels (NL), private equity firm TPG (September 2017) and to MobGen (NL).



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: Honorary Advisor Council Food Industry Asia; member Advisory Board Lee Kong Chian School of Business, Singapore Management University; non-executive Director Max BUPA Health Insurance Co Ltd. (India), non-executive Director Antara Senior Living Ltd. and Antara Purukul Senior Living Ltd. (India) (until Oct. 2017); President Pant Consulting Pte. Ltd.



John Ramsay (1957, m)

First appointed: 2017. End of current term: 2021. Nationality: British. Audit Committee (member), Last position held: Chief Financial Officer (CFO) of Syngenta AG. Supervisory directorships/other positions: non-executive director member of the Board of RHI Magnesita NV (as per 6 October 2017) and non-executive member of the Board of G4S plc (as per 1 January 2018), advisor to Clarmondial.

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: Non-executive Director of Unilever; Member Supervisory Board Dutch Central Bank (DNB); Member Global CEO Council (GCC) Chinese People's Association for Friendship with Foreign Countries (CPAFFC); Climate leader for the World Bank Group; Co-Chair of the High Level Assembly of the Carbon Pricing Leadership Coalition (CPLC), convened by the World Bank.
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: Board member of Catalyst Europe; Co-Chair of A4S (Accounting 4 Sustainability) CFO Leadership Network.
e-mail: geraldine.matchett@dsm.com



Dimitri de Vreeze (1967, m)

Position: member Managing Board since September 2013. End of current term: 2021.

Nationality: Dutch.

Supervisory directorships/other positions held: Chairman Supervisory Board DSM Netherlands; Board member CEFIC (European Chemical Industry Council); Board member Chemicalinvest; Board member DSM Sinochem Pharmaceuticals (DSP); 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 2017

DSM is always trying to improve, but sometimes things still go wrong. Here we share the most significant incidents of 2017 across all three dimensions of People, Planet and Profit. This includes health, safety, environment, and security incidents as well as what we have learned from business that has not developed as planned.

Preventing repeat problems means understanding each incident to the best of our ability. When a problem occurs, DSM first tries to repair any damage, take care of injuries and act with compassion. We also trigger an improvement cycle (see 'Health & wellness' on page 35). This includes investigating root causes and trying to eliminate them. We put new requirements or operating procedures in place as needed. For example, in DSM Nutritional Products, in response to the incidents with forklifts in 2017, a new business group standard on internal transport was developed and introduced.

DSM applies zero tolerance to violations of the DSM Code of Business Conduct (see page 108). DSM does not disclose any personal details in cases involving individuals.

In line with our reporting policy, this overview includes incidents and some serious near-misses. Near-misses are cases that did not result in injury, illness or damage but could have done so. Even when crisis is averted, it is our responsibility to learn and do better.

People

Fatal incidents

Tragically, in September 2017 there was a fatal incident at our site in Augusta (Georgia, USA). One contractor passed away, another was severely injured and a third suffered less severe injuries in the same incident. The root causes have been thoroughly investigated and the lessons learned are being implemented. We are committed to the safety of all workers and will continue to pay close attention to contractor safety. DSM is supporting the affected families.

Incidents involving falls

At DSM Nutritional Products in Sisseln (Switzerland), an operator missed his footing on the top step of a four-step ladder. He landed on his back, which resulted in swelling. He also landed on the back of his head, causing a slight headache. At the same place but in a different incident, a contractor came down a ladder and lost his balance on the second to last step. He stumbled backwards, and hit the top of a hand lever of a valve, resulting in a serious flesh wound.

At DSM Nutritional Products in Liaocheng (China), a contractor fell from a 1.8 m-high molding rack while climbing a scaffold of an office building that was being constructed. The contractor suffered severe head injuries.

At DSM Dyneema in Heerlen (Netherlands), an employee broke his ankle by falling down the stairs in a hotel where he attended a training.

Incidents involving forklift trucks

At DSM Nutritional Products in Grenzach (Germany), a pallet truck ran over the top of an operator's shoe. The operator's foot was broken in several places.

At DSM Nutritional Products in Campo Grande (Brazil), a contractor was struck by a moving forklift. He sustained fractures and a small displacement to an ankle.

At DSM Engineering Plastics in Togliatti (Russia), an operator stepped backwards and his foot was broken by the wheel of a forklift.

Incidents with allergic reactions

At DSM Nutritional Products in Ueberlandia (Brazil), an employee had an allergic reaction during venom extraction resulting from sensitization.

At DSM Nutritional Products in Sisseln (Switzerland), an operator who worked for four years in the Rocephin plant had an acute allergic reaction during shutdown revision work. The operator's allergy has been confirmed by extensive allergy testing.

Other safety incidents

At DSM Nutritional Products in Village-Neuf (France), hot water spilled onto an operator's abdomen, resulting in a second-degree burn.

At DSM Nutritional Products in Sisseln (Switzerland), a sample exploded in the lab due to overpressure. A lab technician suffered an eye injury despite wearing safety glasses.

At DSM Engineering Plastics in Geleen (Netherlands), a contractor employee got his finger caught between the door handle and the steel pillar of the building wall, leading to a permanent impairment.

At DSM Nutritional Products in Jaguaré (Brazil), an employee performing a repair inside a mixer was almost engulfed by hundreds of kilograms of product, because the right procedures for safeguarding equipment before starting the work (lock-out/tag-out/try-out) had not been followed. Fortunately, the employee did not have any injuries.

At DSM Nutritional Products in Lalden (Switzerland), a closed ammonia cylinder in an experimental laboratory set-up exploded due to overpressure, caused by failure of an electrical heating element (uncontrolled overheating). The incident resulted in only physical damage. Fortunately, no one was injured because the failure occurred overnight when nobody was present in the laboratory.

Privacy incidents

In November, some employees received an unexpected email from Uber. Many reported it as a phishing attempt. An investigation revealed that access to the travel and expense system was shared with Uber by a DSM employee in the US. DSM and Uber had agreed upon an exchange of data of US employees; however, the DSM employee accidentally provided access to data for all employees. Immediate actions were taken to close the link and Uber confirmed it deleted the DSM data immediately. Actions have been taken to prevent such a disclosure in the future. The breach was reported to the Dutch Privacy Authority, as well as one other incident related to phishing.

Planet

At our site shared by DSM Nutritional Products and DSM Food Specialties in Xinghuo (China), one of our production plants had to be stopped for three months because of odor complaints from a nearby residential area. An off-gas treatment system is currently being installed. In the meantime, the plant is running at reduced capacity.

DSM experienced several minor incidents that led to a loss of primary containment from our installations. For example, at our DSM Food Specialties site in Delft (Netherlands) nitric acid was released from the installation during maintenance work and at our DSM Dyneema site in Heerlen (Netherlands) the hazardous content of a vessel leaked on the floor due to a valve failure. In all cases, an immediate cleanup prevented any impact to the environment or harm to people.

Profit

At DSM Food Specialties in Seclin (France), a contamination was identified that required cleaning of the production line, causing a loss of production volume for several days. After cleaning the plant was restarted without further problems.

DSM Resins & Functional Materials incurred higher supply costs globally, caused by shortage of raw material.

At DSM Resins & Functional Materials in Waalwijk (Netherlands), raw material quality problems caused the loss of three days' production volume.

At DSM Nutritional Products in Brazil, a quality complaint has resulted in a financial compensation for the customer.

Due to the decision to shut down a power plant at DSM Nutritional Products in Jiangshan (China), employees stopped operations to protest against this decision. This caused a loss of production of several days.

At DSM Nutritional Products at Village-Neuf (France), a dispute with employees concerning the calculation of working hours was resolved by ruling of the industrial court of Mulhouse, resulting in an additional payment of wages.

Several employees received emails that were supposedly sent by the CEO, urgently asking them to transfer money to an external bank account. Thanks to the alertness of these employees, no other action was required after reporting these mails to our Information Security office.

A regional outbreak of avian flu in China caused people to eat less poultry meat than usual, resulting in temporarily lower market demand for the animal nutrition business of DSM Nutritional Products in China.

The animal nutrition business of DSM Nutritional Products in Brazil experienced the consequences of a serious third party reputation incident in the downstream value chain, often referred to as the 'weak meat' scandal.

DSM Nutritional Products (Personal Care business) suffered a production loss of several days caused by a 'force majeure' at an important raw material supplier.

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 2017 was 174,794,656. All shares in issue are fully paid. On 31 December 2017, the company had 174,643,475 ordinary shares outstanding.

Reset dividend on Cumulative Preference Shares A

As it is DSM's policy to offer a fair dividend to all its shareholders by providing a stable, and preferably rising dividend, it was proposed to, and approved by the AGM in May 2017 to modify the Articles of Association such that the dividend percentage of the Cumulative Preference Shares A every year will be based upon the dividend yield of the ordinary shares in the preceding year (dividend as a percentage of the average share price). This percentage may be increased or decreased by a markup or discount of no more than one hundred (100) basis points, to be determined by the Managing Board in consultation with the Supervisory Board. The basis of computation of the dividend on the Preference Shares remained fixed at € 5.2942 (Article 32 section 3 of the Articles of Association). This amendment aligns the interests of the Preference Shareholders with the interest of ordinary shareholders in terms of dividend yield.

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 3 May 2017 this power was extended up to and including 3 November 2018, 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 2017:

- ASR Nederland N.V.
- BlackRock, Inc.
- Capital Research and Management Company and Capital Group International Inc.
- NN Group N.V.
- Rabobank Nederland Participatie B.V.

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 3 May 2017 the Managing Board was authorized to acquire own shares for a period of 18 months from said date (i.e. up to and including 3 November 2018), 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 2017 for the purpose of covering the company's commitments under existing management and employee option plans, share (unit) plans and stock dividend. Two programs were run for this purpose during the year, the first from 13 March to 13 July 2017 and the second from 14 August to 14 November 2017. In total DSM repurchased 4,500,000 shares for a combined consideration of € 297 million.

Development of the number of ordinary DSM shares

	2017			2016
	Issued	Repurchased	Outstanding	Outstanding
Balance at 1 January	181,425,000	6,423,334	175,001,666	174,923,027
Changes:				
Reissue of shares in connection with exercise of option rights	-	(2,238,144)	2,238,144	3,243,102
Repurchase of shares	-	4,500,000	(4,500,000)	(5,200,000)
Dividend in the form of ordinary shares	-	(1,903,665)	1,903,665	2,035,537
Balance at 31 December	181,425,000	6,781,525	174,643,475	175,001,666
DSM share prices on Euronext Amsterdam (€ per ordinary share):				
Highest closing price			81.66	64.18
Lowest closing price			57.20	41.40
At 31 December			79.67	56.96
Market capitalization at 31 December (€ million) ¹			14,454	10,334

¹ Source: Bloomberg.

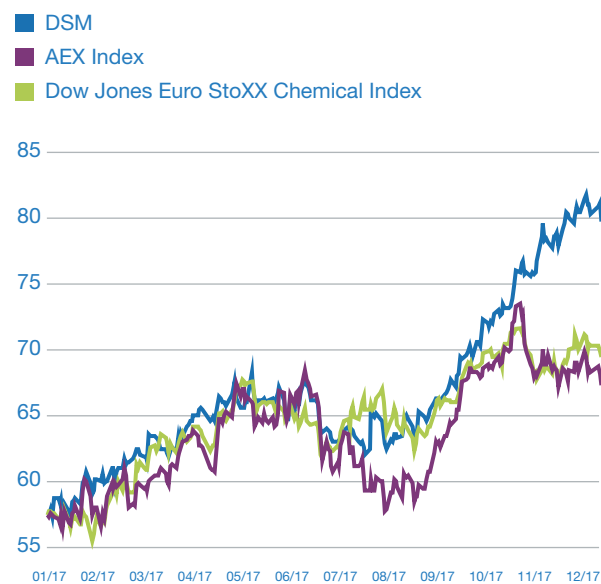
Geographical spread of DSM shares outstanding

in % (excl. cumprefs A)	2017	2016
North America	37	39
United Kingdom	18	17
Netherlands	15	16
France	9	7
Germany	5	4
Switzerland	4	5
Asia-Pacific	4	4
Other countries	8	8

DSM share price development versus AEX and Dow Jones Euro StoXX Chemical Index, 2017

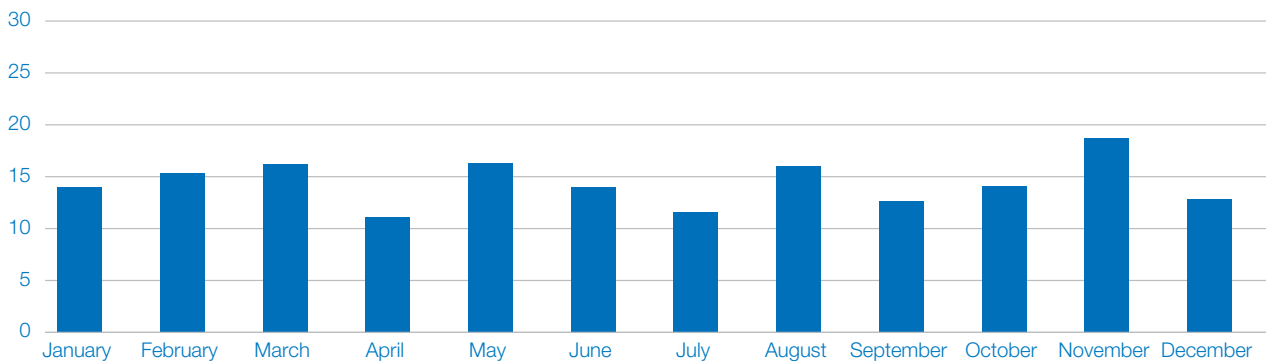
(Rebased versus DSM share price)

x €



Trading volume DSM shares 2017

x million shares as reported by Euronext Amsterdam



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:

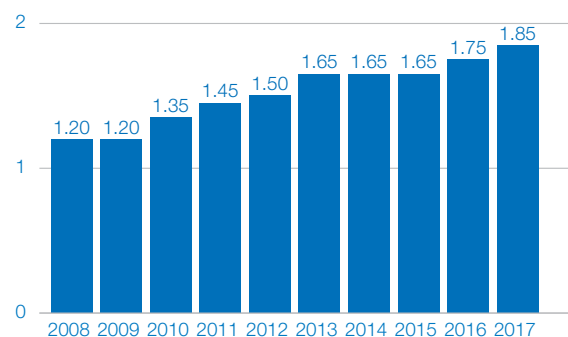
- Information on major shareholdings can be found above (Distribution of shares).
- There are no special statutory rights attached to the shares of the company.
- There are no restrictions on the voting rights of the company's shares. When convening a General Meeting of Shareholders, the Managing Board 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 101.
- 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 € 1.85 per ordinary share for 2017. This will be proposed to the Annual General Meeting of Shareholders to be held on 9 May 2018. An interim dividend of €0.58 per ordinary share having been paid in August 2017, the final dividend would then amount to € 1.27 per ordinary share. The dividend will be payable in cash or in the form of ordinary shares at the option of the shareholder, with a maximum of 40% of the dividend amount available for stock dividend. If more than 40% of the total dividend is requested by the shareholders to be paid out in shares, those shareholders who have chosen to receive their dividend in shares will receive their stock dividend on a pro-rata basis, the remainder being paid out in cash. Dividend in cash will be paid after deduction of 15% Dutch dividend withholding tax. The ex-dividend date is 11 May 2018.

Dividend per ordinary share in €

2017 dividend subject to approval by Annual General Meeting of Shareholders



Sustainability statements

Sustainability statements – People

	2017	2016	2015	2014	2013
Total workforce	21,054	20,786	20,796	21,351	23,485
Female/male ratio	27/73	27/73	28/72	27/73	26/74
% by age category¹					
<26 years	6	6	5	6	6
26-35 years	26	25	26	25	24
36-45 years	28	28	30	29	30
46-55 years	25	27	27	28	28
>55	15	14	12	12	12
% non-Dutch¹					
Executives	56	53	49	51	50
Management	70	67	68	64	65
Other	85	81	82	77	78
% female¹					
Executives	17	15	15	12	11
Management	27	26	27	24	23
Other	28	29	29	28	27
% executive hires¹					
Non-Dutch	95	88	79	88	75
Female	43	13	38	25	23
% new hires by region¹					
Netherlands	11	5	11	11	10
Rest of Europe	26	23	22	19	23
North America	20	27	16	26	26
China	16	20	18	18	16
Rest of Asia-Pacific	11	8	13	18	19
Rest of the world	15	17	22	8	6
Total number new hires (excluding acquisitions)	2,203	1,730	2,171	1,997	1,834
Acquisitions	247	46	1810	169	199
Outflow of employees					
Voluntary resignations	766	585	1,153	1,011	1,043
Dismissed	895	781	647	411	224
Reorganization	157	208	230	221	408
Retirements	112	143	170	167	259
Deceased	13	12	12	11	34
Total outflow (excluding divestments)	1,943	1,729	2,212	1,821	1,968
Divestments	42	57	2,324	2,479	78
Voluntary resignations (% total workforce)	4.1	2.8	5.5	4.7	4.4
Total resignations (% total workforce)	10.2	8.3	10.6	8.5	8.4
Development training in hours per employee	19	25	29	25	25
Net sales per employee (x € 1,000)	420	386	374	409	401
Safety					
Frequency Index of Recordable Injuries (per 100 DSM employees and contractor employees)	0.36	0.33	0.41	0.47	0.38

¹ For the indexes based on age, nationalities, gender, inflow and outflow, the companies that are not integrated into the HR systems (approximately 10% of the total workforce) are not taken into account.

Sustainability statements – Brighter Living Solutions

	2017	2016	2015	2014	2013
Brighter Living Solutions sales as % of net sales	62	63 ¹	-	-	-

¹ 2016 was the first year of reporting; consequently, there are no comparative figures for the previous years.

Sustainability statements – Planet

	2017	2016	2015 ¹	2014 ¹	2013 ¹
Energy and greenhouse gases					
Energy use (in petajoules)	23.6	22.6	20.9	39.1	41.1
Energy efficiency improvement (in %) versus 2015	3	2 ²			
Greenhouse-gas emissions scope 1 + 2, location-based (in CO ₂ equivalents x million tons)	1.6	1.5	1.1	4.2	4.2
Greenhouse-gas emissions scope 1 + 2, market-based (in CO ₂ equivalents x million tons)	1.5	1.4 ²			
Emissions to air					
Volatile Organic Compounds (x 1,000 tons)	6.6	8.9	3.1	4.2	4.3
Nitrogen oxide (NO _x) (x 1,000 tons)	0.7	0.8	0.4	1.5	1.6
Sulfur dioxide (SO ₂) (x 1,000 tons)	0.28	0.33	0.04	0.08	0.07
Discharges to water and landfill					
Chemical Oxygen Demand discharges to surface waters (x 1,000 tons)	2.5	2.4	2.1	3.9	4.8
Waste recycled (in %)	84	83 ²			
(Landfilling) Non-hazardous waste (x 1,000 tons)	20	17.5	12.9	18.2	22.7
Water					
Water consumption (x million m ³)	23	22 ²			
Water use (x million m ³)	114	104	101	118	150
Raw materials					
Renewable raw materials (in %)	15.4	16.5	16	10.8	9.9
Biodiversity					
Sites in or adjacent to protected areas (in %)	61	60	58	52	40
Fines (in €)	128,400	27,900	35,600	62,500	62,300
Non-monetary sanctions	4	2	5	4	4
Environmental incidents	101	109 ³	257	297	261
Environmental complaints	35	21	31	56	42

¹ DSM completed several material acquisitions and divestments over the period 2013-2015. The figures presented here are not restated for the effect of this activity and so do not accurately represent our environmental trends. For year on year comparison, please see 2016-2017 data. For more information on our environmental footprint please visit the company website.

² 2016 was the first year of reporting; consequently, there are no comparative figures for the previous years.

³ As of 2016, the Loss of Primary Containment of non-hazardous substances is no longer included in this number.

This report has been prepared in accordance with the GRI Standards: Comprehensive option. The GRI content index is provided on the company website.

DSM aligns with the recommendations of the International Integrated Reporting Council (IIRC) Framework where possible.

Stakeholder Engagement

In the following pages, we present some examples of how we engage with external stakeholders, including the partners in our value chain. For an overview of all our stakeholders, please see 'Stakeholders' on page 26. For information on how we engage with our employees, see 'Workforce engagement' in 'People' on page 37.

Customers

Customers are the driving force behind 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. For more information on our businesses and our relationships with customers, see 'Review of business' starting on page 68.

Providing value to customers

Although our bright science-driven solutions are not always immediately visible to consumers, they are of strategic importance to our customers and recognized as such. Our solutions enable our customers to differentiate and solve consumer needs. Our unique products and innovations not only ensure a strong loyalty from our customers, they are also driving our growth.

To bring value to our customers, we not only focus on the products we bring today; we also deepen our understanding of the total ecosystem in which our customers operate to anticipate future consumer needs. Through our consumer and customer insights, we aim to become a stronger strategic partner for our customers and to increase their loyalty. It is through this customer-centric approach that we become a more valued strategic partner.

For example, through this approach we have become a valued strategic partner of carpet company Mohawk. Together Mohawk and DSM-Niaga won the Surface Innovation Award at the Floor Surfaces Trade Show in Las Vegas (Nevada, USA), where Mohawk launched the first fully recyclable carpet based on our technology. By supporting development and commercialization of 100% recyclable carpet, DSM-Niaga helped Mohawk address society's need for more responsible consumption and production based on the principles of the circular economy.

Customer loyalty

Net Promotor Score (NPS) is our key metric to measure customer loyalty. Our ever-increasing awareness around customer loyalty has ensured that all our business groups have in place a robust NPS cycle which provides valuable insight. In 2017, our NPS score reached 39 (2016: 38).

Our business groups create improvement programs to increase customer loyalty based on their feedback. DSM

Feedlot Tour is a strong example of a program to address this. It is a circuit of annual technical meetings occurring during the dry season in Brazil. At these gatherings, DSM shares knowledge and training on the latest technology in animal nutrition worldwide. These Feedlot Tours are organized together with our customers, and we actively demonstrate the impact of our solutions, from the dietary ingredients and additives to the zootechnical and economic results. Partners like the economic research center, CEPEA, at ESALQ (Luiz de Queiroz College of Agriculture, University of São Paulo, Brazil) support us.

A key driver to increase customer loyalty is the ease of doing business with DSM. This requires a genuinely customer-centric approach. In many business groups, we are deepening our understanding of customer journeys and customer touchpoints. These outcomes are used to improve our online and offline customer interactions and will result in easier and stronger interaction. The 24/7 EngineerConnect program developed by DSM Engineering Plastics was created to make it easier to do business with DSM. Engineers in the automotive industry strive for faster time-to-market and first-time-right products and solutions. They want to understand in an early stage of development what the available possibilities and solutions might be. 24/7 EngineerConnect is a digital platform that gives our customers' engineers access to the latest innovations, concepts, materials and technology. Through artificial intelligence and our extensive knowledge, they can connect with the right expert at the right time and collaborate on new design projects at the earliest stage.

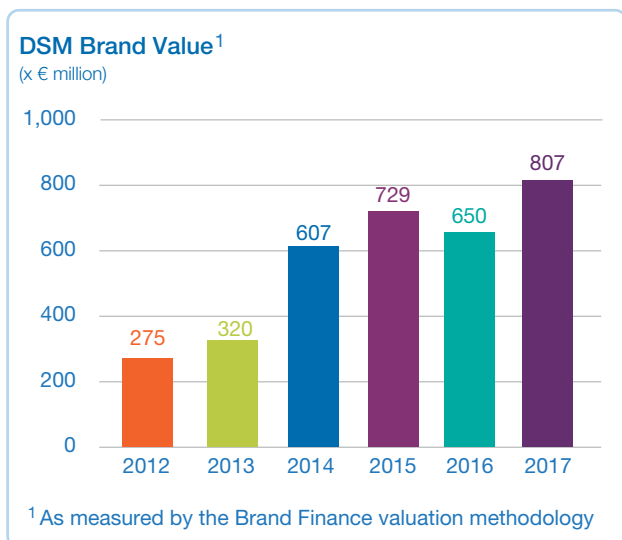
Personal interaction with our customers is important and our bright minds and skilled professionals support our customers to match their needs with the solutions we offer. Therefore, we put continuous effort in educating and training our commercial crew. In 2017, many Marketing & Sales (M&S) colleagues from all business groups were certified on the key principles in M&S. Through an actionable and inspirational blended learning program, co-developed with Vlerick Business School (Gent, Belgium), M&S professionals learn the essentials of customer-centricity. This allows us to better understand the needs of our customers and their consumers, and ensure DSM keeps developing relevant solutions.

Brand value

The combination of a true customer understanding and a smooth customer interaction defines the success of our customer-centric approach. Our strong brand reflects this and articulates what DSM stands for: 'Bright Science. Brighter Living.' These values drive our customer relationships and form the basis of our growth.

We consider our brand an important business asset and we aspire to be a company with a reputation for providing innovative and sustainable solutions that fulfill the needs of our market segments and society. DSM's brand value as

assessed by Brand Finance has grown considerably over the last five years and for 2017 was valued at € 807 million. The increase versus prior year was primarily attributable to strong revenues and forecasts, based on improving financial results.



Suppliers

We engage with approximately 34,000 suppliers through our Supplier Sustainability Program (SSP) to strengthen our supply chain, reduce risk, lower cost and create value for society and our company. Annual supplier sustainability plans and sustainability roadmaps are used to gain insights. The Supplier Sustainability Plan 2017 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

Solutions	Better Business	Supplier Relationship Management
		Brighter Living Solutions
Compliance	Supplier Code of Conduct	Requirements to do business with DSM
	TfS Assessments & Audits	High Risk – Mandatory Corrective Action Plan / Opportunity
		Medium Risk – Recommended Corrective Action Plan / Opportunity
		Low Risk – Opportunity for value creation

Supplier Sustainability Program strategy

Compliance and Solutions are the two main elements of DSM's SSP. Insights gathered in the compliance program

enabled us 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.

Our assessment of the maturity level of our SSP was conducted in 2016 and addressed four dimensions: Strategy/ Plan; Supply Risk & Opportunity; People, Infrastructure & Measurements; and Processes. Those insights were used to develop our sourcing strategy and position to meet the ambition level for 2020.

Internal skills and capabilities

Internal capability-building regarding supplier sustainability continued in 2017. We have shifted the focus from delivering training toward providing hands-on support and promoting peer learning. The peer learnings offer practical experience and knowledge-sharing on integrating sustainability into the daily work of sourcing professionals. The Strategic Sourcing Methodology Award and Best Supplier Innovation Award highlight sustainability as a key topic in selecting the winners.

Collaboration

We work with external partners to enhance collaboration in the supply chain such as the Roundtable for Sustainable Palm Oil (RSPO) and Together for Sustainability (TfS).

Our exposure to palm oil is very limited. DSM Nutritional Products is a member of RSPO due to the potential risks to the environment, human rights issues and labor practices in the palm oil supply chain. DSM Food Specialties has improved the sustainability of their sourcing of palm-derived glycerin. For more information, see 'Better business' in this chapter.

We have 'Friends of the Sea' certification for over 96% of our fish oil purchases. This helps ensure that the fisheries involved in providing fish oil for the production of our omega-3 product range are sustainable.

Compliance

Our approach to compliance is defined in our Supplier Code of Conduct (SCoC). Through assessments and audits, we check that suppliers act in compliance with external and internal norms and values. 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 2017, 96% of DSM's spend was covered by the SCoC.

Supplier Sustainability Program results

	2017			2016		
	Target	Achieved	Leverage TfS ¹ pool	Target	Achieved	Leverage TfS ¹ pool
Spend coverage SCoC	95%	96%	-	91%	96%	-
Sustainability assessments	110	68	1,230	200	200	996
Sustainability audits	21	19	132	20	20	105
Quality audits	-	343	-	-	241	-
Solutions	35	62	-	36	50	-

¹ Total number of DSM suppliers assessed by TfS members.

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 20 members 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. It enabled DSM to screen approximately 4,700 suppliers in 2017, resulting in 1.2% 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 10% 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 was 54 in 2017, the same as 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 8,962 EcoVadis assessments and 1,187 TfS audits. In total, 1,794 sustainability assessments were shared among TfS members and 441 new TfS audit reports were received by the initiative.

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 and nutrition security, health, and the circular economy. In this context, DSM Sourcing pursues initiatives to create joint value, awareness and engagement using similar drivers to those in our Brighter Living Solutions methodology.

We continued to engage in joint initiatives with suppliers that led to environmental benefits in the value chain. These included in packaging (e.g. the switch to fully recyclable fiber drum solutions) and logistics (e.g. the collaboration platform 'Biceps' in marine transport) resulting in significant reductions in CO₂ emissions. Via the CO₂ Emission Reduction Initiative, the physical distribution team investigates suppliers' footprints in road transportation, marine, packaging and, as of 2016, also air transportation 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 per unit of measurement in emissions associated with logistics and packaging. Since 2012, over 47% of the attainable global spend on physical distribution has been covered by the Green Tender Initiative. The cumulative CO₂ emission reduction compared to 2010 reached 18% per unit of measurement at the end of 2016, the latest reporting period.

In Emmen (Netherlands), a project was executed to improve Hands on tool time (Hott). This project started by identifying where time is lost in the work permit process. Based on the outcome of this, together with the local maintenance department, a new work-permit process and tool were implemented. This project resulted in a 40% reduction in preparation time for work permits, an 80% reduction in permit mistakes and reduced waiting times by one third.

DSM Food Specialties' purchasing team continued to work on replacing palm-derived glycerin with glycerin from more sustainable sources. Working closely with their suppliers, DSM succeeded in switching to a number of more sustainable products in 2017. In Asia, we switched to a palm-derived

glycerin with RSPO mass balance certification, replacing a non-sustainable version. Meanwhile, operations in the US successfully switched altogether from palm-derived glycerin to glycerin derived from rapeseed (also called canola).

Investors

DSM actively maintains contact with current and potential shareholders of DSM and with analysts who advise shareholders. DSM provides quality information to investors and analysts about developments at DSM, ensuring that relevant information is equally and simultaneously provided and accessible to all interested parties.

Relevant information is made available through annual and quarterly reports, press releases, presentations to investors and the company website. In addition, DSM organizes analyst conferences, regular road shows for investors and conference calls. Any explanations and discussions are based on information that is already in the public domain. DSM engaged with our investors and their representatives on topics such as the SDGs, climate change, sustainability in supply chain management, natural and social capital, and responsible taxation.

In June, we hosted an Environmental, Social and Governance (ESG) seminar for investors at the Brightlands Chemelot Campus in Sittard-Geleen (Netherlands), providing insights into DSM's ESG performance and our ambitious targets and initiatives.

In September, an Investor Day was hosted in the Netherlands, with a visit to DSM's new biotechnology center in Delft and a conference in The Hague (Netherlands) in which DSM gave an overview of the status of the implementation and progress of Strategy 2018. Special attention was given to the growth profile and aspirations of the Nutrition and Materials businesses.

Scientific Research Institutions

DSM provides funding and shares knowledge, research and facilities with renowned research institutions.

DSM is one of the founding partners of EIT FOOD, which is one of the six European Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT). The aim of EIT FOOD is to transform the food ecosystem. By connecting consumers with businesses, start-ups, researchers and students from around Europe, EIT FOOD supports innovative and economically sustainable initiatives which improve health, access to quality food, and our environment.

DSM Nutritional Products has broadened its successful collaboration with the Biomedical Sciences Research Institute

at the University of Ulster, Coleraine (United Kingdom). This collaboration focuses on understanding the role of vitamin B2 in hypertension in genetically predisposed subjects. The results so far indicate that optimizing this vitamin's level in the subjects shows promise for managing their high blood pressure.

We are a founding member of the world-class nanotechnology center at MIT in Boston (Massachusetts, USA). Called 'MIT.nano', the center will provide nano research facilities to MIT researchers and students, as well as to industrial partners like us. Nanotechnology drives advances across many of our areas of interest, like solar energy and energy storage. We expect that the facility will be ready to move into as of June 2018.

NGOs

DSM works with NGOs and civil society to work towards solutions for the world's societal challenges.

DSM sent a delegation of 23 young professionals, representing all business groups and all regions, to the One Young World Summit in Bogotá (Colombia). This global platform brings together the brightest young leaders from companies, NGOs and academia, empowering them to formulate and share innovative solutions to the world's most pressing issues such as malnutrition and climate change. On their return, the delegates champion local sustainability initiatives, including coordinating our local Earth Day activities.

The Vocational Educational Center ('Centro Educacional Assistencial Profissionalizante', CEAP) contributes to educational development in Brazil. Over 6,000 teenagers have already benefitted from educational and vocational programs. DSM's partnership with CEAP aims to make a positive contribution to these teenagers' lives through more prepared and qualified trainings.

In China, we continue to engage with a number of NGOs such as World Wildlife Fund, World Vision China and the Climate Group on topics such as climate change, renewable energy and nutrition improvement. We also started engaging with the China National Institution of Standardization on green product design and life cycle assessment.

In Japan, we hosted the DSM Environmental Forum with guests from local universities, the UN Environment Programme - Finance Initiative, and industry representatives. The event was open to the public and included a screening of the National Geographic documentary 'Before the Flood' in Tokyo.

Local communities

DSM engages in the communities in which we operate on topics that are locally relevant.

In North America, we worked with the Seafood Nutrition Partnership to develop a community education and awareness platform on the benefits of eating seafood, and on the role of omega-3 in healthy diets.

We engaged in several events, together with the US Chamber of Commerce Foundation on food security and the circular economy, and the Diversity Council to highlight issues relating to gender, race, age and handicap inclusion and diversity.

In Brazil, we ran several projects to reach out to schools and communities. These projects provided opportunities for local students to learn about the job market, educate teachers on and provide training materials about topics like environment, health and work, and to educate communities on the consumption of natural resources and electricity.

Governments

Our engagements with governments are increasingly important considering our commitment to supporting the Paris Agreement and the Sustainable Development Goals.

We are actively involved in the EU's Horizon2020 Framework Programme and are participating in a variety of projects ranging from bio-based feedstock for polymers, process control, product safety and various Marie Curie training networks.

In China, our CEO Feike Sijbesma engaged with government officials, thought leaders and business leaders on topics including the Chinese economy, climate change, carbon trading and pricing, and renewable energy.

Management approach for material topics

In the following tables, we elaborate on the material topics defined in the materiality matrix (see 'Materiality' on page 26) and describe how we manage these topics.

Society

Health & wellness	Management approach	Relevant sections
<p>The global population is growing and aging. People are living longer. Consumer preferences are shifting toward healthier diets including food perceived as natural. At the same time, there are an increasing number of people who are overweight/obese, which is driving higher levels of noncommunicable disease like diabetes. Businesses are expected to provide safe workplaces. Health and safety issues at home or in the workplace have detrimental effects on individuals, businesses and the rest of society. This topic aligns with SDG 3 (Good Health and Well-being).</p>	<p>Health and wellness is a key focus for DSM. Our Nutrition strategy targets health and well-being, including products addressing sugar and salt levels. Our EBA Biomedical works with the medical industry to provide products that improve health and quality of life and combat disease. Through our Materials strategy, we focus on the elimination of hazardous substances in our supply chain, and offer products that are safer to use. We strive to offer our staff a safe and healthy workplace.</p>	<p>Strategy 2018 People Review of business</p>
Malnutrition & nutrition security	Management approach	Relevant sections
<p>The cost of malnutrition to society is vast. The impact of undernutrition on health and development affects all of society. There are many people who have an insufficient intake of micronutrients (vitamins and minerals) and cannot access food that is both calorifically and nutritionally sufficient to foster health and well-being. This topic aligns with SDG 2 (Zero Hunger).</p>	<p>DSM works closely in partnerships with UN agencies, governments and NGOs to address the quality and availability of the food basket in the developing world. Our Nutrition cluster provides nutrition and food solutions that address both emerging and developed markets.</p>	<p>Stakeholders — Collaborative platforms and networks Nutrition</p>
Emerging economies	Management approach	Relevant sections
<p>The emerging economies include what are referred to as the 'BRIC' countries, as well as other economies such as those of South East Asia, Latin America and Africa. These continue to show population and economic growth. We also see increasing urbanization and growing demand for energy, infrastructure and discretionary items.</p>	<p>DSM's Strategy 2018: <i>Driving Profitable Growth</i> is central to the management of our regional approach and footprint. Our regional footprint means we are locally represented and understand local dynamics. We manage our global supply chain through our Supplier Sustainability Program and Human Rights Policy.</p>	<p>Strategy 2018 Sustainability statements — DSM Supplier Sustainability Program People — Human rights</p>

Geopolitical tensions & inequalities

Recent political events, such as elections and referenda, and other events, such as (the threat of) terrorist acts, around the world show the increasing role of tension and inequality on global stability. These tensions have the potential to delay or derail our efforts towards achieving the SDGs.

Management approach

We address the potential impact of this topic through stakeholder engagement activities, such as the World Economic Forum (WEF) and the UN Global Compact (UNGC). Corporate Risk Management also monitors developments in this area.

Relevant sections

Stakeholders –
Collaborative platforms and networks
Risk management

Environment**Climate change & renewable energy**

It is widely accepted that human activity is responsible for climate change. Recent events, such as repeated coral bleaching, highlight that we need to take this topic seriously. The Paris Agreement will set the regulatory framework within which society needs to navigate to achieve a less than 2°C average temperature increase. We see tackling climate change as both a responsibility and an opportunity for businesses that are prepared to embrace it. Renewable energy forms an integral part of this topic to contribute to a low-carbon future. This topic aligns with SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action).

Management approach

We manage this topic by reducing our own carbon footprint. This is done via a range of initiatives, including increasing our use of renewable energy (our Responsible Care Plan identifies the key metrics that influence this topic); enabling the low-carbon economy through innovative solutions in our value chain (our Materials and Advanced Solar businesses offer solutions that are lighter, more durable, better-performing and have lower carbon footprints); and advocating action on climate by engaging with stakeholder groups and climate advocates such as UNGC, the Carbon Pricing Leadership Coalition (CPLC), RE100 and the Dutch Sustainable Growth Coalition. We publicly disclose our impact and strategy through, among others, CDP.

Relevant sections

Stakeholders –
Collaborative platforms and networks
Planet
Nutrition
Materials

Resource scarcity / Circular & bio-based economy

The circular economy is one that is restorative by design. We include in this topic the bio-based and sharing economies, which help to address growing resource scarcity. We see opportunities in product and system design, and to investigate lower-impact business models, including sharing models that highlight reusability, renewability and recyclability. This topic aligns with SDG 12 (Responsible Consumption and Production).

Management approach

The circular and bio-based economy is identified as one of DSM's sustainable growth areas and plays a central role as a business driver. This topic is a key driver for the strategy and portfolio of, among others, our Materials business, our EBA DSM Bio-based Products & Services and our joint venture, DSM-Niaga. We engage with likeminded partners on this topic such as the Ellen MacArthur Foundation and Circle Economy.

Relevant sections

Planet
Materials
Innovation Center

<p>Water security</p> <p>Water is a global issue that has local impact and is growing in importance to society. Many areas of the world already face water scarcity and water pollution issues, and the impact of climate change will only make this worse. Water availability and water quality are issues that impact on industry and society at large. Water security is an operational and reputational business risk for companies, including DSM.</p>	<p>Management approach</p> <p>We are committed to the responsible use of water resources. Our approach to water is guided by our Responsible Care Plan, and addresses water from a regional perspective. Our management approach focuses our resources on regions of water scarcity and sites that have a relatively high groundwater consumption or waste water discharge. Through this risk-based approach, we ensure that appropriate measures are taken where they are needed most. DSM is a signatory to the UN CEO Water mandate. We were awarded an A-rating for our policy and performance on water by CDP. We address water in our supply chain via the Supplier Sustainability Program.</p>	<p>Relevant sections</p> <p>Planet</p>
<p>Sustainable food systems</p> <p>The growing global population is placing increasing pressure on food systems to produce larger quantities of food, and food that is more nutritious. These food systems place pressure on, and are under pressure from, the environment. New and sustainable food systems are needed to provide a reliable food supply for society.</p>	<p>Management approach</p> <p>DSM addresses food systems through our portfolio of Animal Nutrition & Health. We explore new opportunities in sustainable proteins such as our Clean Cow project, the Proteins of the Future project (e.g. CanolaPRO™), and the Green Ocean partnership. DSM Food Specialties provides innovative food ingredient and packaging solutions that address food waste through extended shelf life and more efficient processing. We are a founding member of FReSH where we contribute to its aim to transform global food systems.</p>	<p>Relevant sections</p> <p>Nutrition</p>
<p>Biodiversity</p> <p>Biodiversity refers to the variety and variability of life on earth and is an important condition for a sustainable planet. Biodiversity supports relevant ecosystem services that we require, such as food, water and clean air.</p>	<p>Management approach</p> <p>Biodiversity is a locally relevant issue that potentially impacts on our operational locations. The DSM Responsible Care Plan defines how we monitor and assess the impact of our operations on these locations. We support the ambitions of the Convention on Biological Diversity and we continue to explore the role the Natural Capital Protocol can play in supporting our decision making. Our position paper on Biodiversity can be found on the company website.</p>	<p>Relevant sections</p> <p>Planet Biodiversity position paper</p>

Business Enablers

<p>Open innovation</p> <p>Open innovation encourages us to look beyond our own borders for ideas and knowledge, and enables us to pool capabilities and resources with others. Companies that embrace open innovation typically grow faster and generate more sales. Open Innovation and new technologies will help us deliver on the SDGs.</p>	<p>Management approach</p> <p>Innovation is a key growth driver in Strategy 2018: <i>Driving Profitable Growth</i>. We collaborate with our suppliers, customers and other value chain partners to create new solutions in a collaborative way. We employ partnerships, funding and crowd sourcing to foster open innovation. In 2017, the Bright Minds Challenge drew on the knowledge and resources of scientists around the world to address the challenges of scalable renewable energy solutions, and together with our partners, we supported the scale-up of the three winning solutions.</p>	<p>Relevant sections</p> <p>Innovation Center</p>
<p>Careers & employment</p> <p>Employees are one of the most important stakeholder groups for a company, and careers and employment are an important topic to companies and their stakeholders. Employees seek rewarding career opportunities and a healthy work-life balance. They actively seek companies, and engage with employers, that share their values.</p>	<p>Management approach</p> <p>Our HR strategy and policies define how we find, retain and reward our employees. We monitor trends in careers and employment to ensure that our organization is able to adapt to the challenges that we face, such as the role of digitization, and the global footprint of our operations and value chains. We apply the International Labour Standards of the ILO.</p>	<p>Relevant sections</p> <p>People — Careers & employment</p>
<p>Advocacy & stakeholder engagement</p> <p>Companies are playing an increasing role in contributing to the SDGs. Business leaders are urged to be advocates on issues that are important to their business activities. Companies should engage with internal and external stakeholders to understand key issues and the positions they should take.</p>	<p>Management approach</p> <p>DSM is a vocal advocate on issues relating to Climate and energy, Circular and bio-based economy and nutrition as we believe these are important sustainability challenges which we are uniquely positioned to influence. We actively manage our sustainability profile and reputation, and ensure that we take responsibility for our own operations.</p>	<p>Relevant sections</p> <p>Sustainability statements — Stakeholder Engagement Stakeholders — Collaborative platforms and networks</p>
<p>Trade barriers</p> <p>This topic is closely linked to 'Geopolitical tensions & inequalities'. It needs specific attention due to the potential impact of trade barriers on our business, such as trade controls, sanctions and embargoes, restrictions on chemicals, and technology.</p>	<p>Management approach</p> <p>The DSM Code of Business Conduct is central to our approach on this topic. In our supply chain, the Supplier Code of Conduct and our Supplier Sustainability Program define our approach. Trade Control Compliance is managed through our standard business processes and practices.</p>	<p>Relevant sections</p> <p>DSM Code of Business Conduct</p>

Digital transformation	Management approach	Relevant sections
<p>Digitization is transforming the world we live in and the way we do business. The rise (and potential fall) of cryptocurrencies, mobility, social media and the sheer scale of data production are changing the landscape in which we operate. We see the influence of digital transformation on business especially in the areas of manufacturing, marketing and sales, and careers and employment. Digital transformation may also disrupt many of our end-markets, from medical to automotive.</p>	<p>Global shifts and digital transformation are identified in <i>Strategy 2018: Driving Profitable Growth</i> as one of the megatrends to which we are responding. We are piloting big data-based approaches in business applications and continue to develop data science competences within our R&D and IT disciplines. Our Information Security Office and Privacy Policy guide our approach towards the security of information assets.</p>	<p>Strategy 2018</p>

Governance

Responsible business practices	Management approach	Relevant sections
<p>Responsible business practices now includes 'Taxation', and 'Transparency and reporting'. Companies such as ours are expected to do business in a responsible way. This topic covers a wide range of sub-topics including taxation; corporate governance; human rights; labor policies; safety, health and environment (SHE); anti-bribery and corruption; and privacy.</p>	<p>We take our responsibilities as a business seriously. Our approach is guided by the Code of Business Conduct, and in the supply chain, by the Supplier Code of Conduct and Supplier Sustainability Program. Our human rights policy, HR policies and other policies cover the People-related aspects of this topic. 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. Through this report, and our public statements on the company website, we provide transparency in our reporting. Our position paper on Taxation can be found on the company website.</p>	<p>People DSM Code of Business Conduct Corporate governance and risk management Taxation position paper</p>

Product & food safety	Management approach	Relevant sections
<p>The importance of product and food safety can be seen through the impact of poor safety standards on employees and consumers. Poor product and food safety can cause injury or even death.</p>	<p>We address the importance of product and food safety through the Supplier Sustainability Program and our approach to Product Stewardship. Our business processes require us to have practices in place that address quality through the production, handling, preparation, storage and use of our solutions.</p>	<p>Planet — Product Stewardship Sustainability statements — Suppliers Review of business</p>

<p>Bioethics</p> <p>Biotechnology has a strong role to play to provide products and solutions that will address growing and aging populations, and resource scarcity. At the same time, biotechnology, such as genetic modification, is viewed with suspicion and concern by some sections of the population. It is important to address these concerns ethically and openly.</p>	<p>Management approach</p> <p>We manage this topic through our consultations with relevant scientific organizations, industry, NGOs and governments. We use genetically modified micro-organisms (GMMs) in the production process of some of our products, however we do not sell GMMs or products containing GMMs. All GMMs are contained within our production processes. Our position paper on Biotechnology can be found on the company website.</p>	<p>Relevant sections</p> <p>Biotechnology position paper</p>
<p>Product Stewardship</p> <p>Adding Product Stewardship to our Materiality Matrix is a reflection of the increasing expectations of society that companies take responsibility for their products throughout the product lifetime. Inherent in this is our responsibility for the hazards presented by our products and ensuring they are managed in a responsible way.</p>	<p>Management approach</p> <p>Our Product Stewardship network manages regulatory issues relating to Product Stewardship and actively monitors and participates in discussions relating to this topic. We continually update our inventory of Substances of (Very) High Concern within DSM based on the latest information with the ultimate goal of phasing out the use of toxic chemicals throughout our value chains where possible. For all our materials we conduct robust scientific risk assessments of the products and production processes to ensure that we source, make and distribute them in a safe way.</p>	<p>Relevant sections</p> <p>Planet — Product Stewardship</p>

Philanthropy and sponsorships

We are recognized for our efforts in our sustainable growth areas of nutrition, climate and energy, and circular and bio-based economy. On top of this, we also engage in philanthropic and sponsorship activities. In 2017, we donated more than €5.7 million to a range of initiatives. As outlined in our Code of Business Conduct, we do not make political donations. The full text of the Code can be found on the company website.

Asia-Pacific

The Bright Experience event in China was launched together with the World Food Programme to raise awareness and funds to help solve the issue of child hunger and malnutrition. DSM China has been part of the event since it was first introduced in 2007. With this year's theme 'Solve Hunger, Bright Experience', the event attracted DSM employees and their families, as well as partners, from 15 sites in 14 cities including Shanghai and Beijing.

Now in its second year, POSHAN, the CSR program in the state of Maharashtra (India) has reached in total 2.3 million women to communicate the importance of good nutrition for mothers of child-bearing age. DSM is the partner in this program supporting the offline distribution of content. In Pune (India), our program promoted preventative health care education and vocational skills for children, women and the elderly.

Europe

In the Netherlands, we focus on sponsorships in knowledge and education, innovation, arts and culture and sports. We are engaged in long-term partnerships, such as the Nemo Science Museum in Amsterdam; Artis Microbia (Amsterdam), the world's first museum of microbes; the Bonnefanten Museum in Maastricht; and Natuurmonumenten, a Dutch association that manages and protects natural resources in the Netherlands.

In Switzerland, we donated clothes, toiletries, toys and other items as part of the winter charity collection of the Sovereign Order of Malta Switzerland for people in need on the Slovakian border, and Dyneema® gloves to 'IG der Tauchclubs beider Basel', a diving community that cleans the Rhine river in the Basel area. In addition, we sponsored a number of sports clubs in the vicinity of our locations.

Latin America

In Latin America, in-kind sponsorship included campaigns in Brazil donating winter clothing and personal hygiene items to local institutions in the vicinity of our Brazilian sites, the donation of MixMe™ sachets to Hai Africa, a Brazilian charity, that were sent to Nairobi (Kenya), and Project 'New Dreams' providing food baskets to vulnerable families in São Paulo (Brazil).

The Young Professional Project in Mairinque (Brazil) focuses on public school students and gives them insight into the operation of the factory. During the project, students discuss the importance of technical and higher education, how to choose a job/career, the reality of the labor market, the various lines of action, opportunities for professional growth and the activities carried out in the Mairinque factory. So far, more than 5,250 students have participated in this project.

North America

DSM contributed to the Union County College Foundation Close the Gap initiative to provide scholarships to help African American students complete their degrees, thus closing the 'Achievement Gap' in graduation rates between this group and the general student population. The initiative has realized a tripling in graduation rates since the engagement began.

We continued to work with the Global Health Corps to underwrite the cost of two Fellows to 1,000 Days to enable advocacy and engagement in early childhood nutrition issues in the US and around the world.

Sight and Life

The Sight and Life Foundation is a humanitarian nutrition think tank delivering innovative solutions to eliminate all forms of malnutrition in children and women of childbearing age and improve the lives of the world's most vulnerable populations. Through continued support of the Sight and Life Foundation, DSM furthers the advancement of research, implementation science, innovations, and leadership capacity development in nutrition.

The Sight and Life Foundation engaged in a 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. This included the successful launch of the Obaasima quality seal identifying fortified products. In Nigeria, DSM announced a new partnership with UNICEF and Sight and Life to deliver better nutrition to at-risk children and mothers and advocate on a global scale for micronutrient supplementation. In addition, Sight and Life continues forces with PATH, a non-profit organization charged with global health innovation, and Johns Hopkins Bloomberg School of Public Health on systematic reviews of underlying causes of stunting.

Leadership is important to bring about change, therefore Sight and Life recognized two inspiring women, Shilpa Bhatte and Ellen Piwoz, with the Sight and Life Leadership Award at the SUN Global Gathering in Ivory Coast. With the right mix of funding, knowledge, technology, and enabling policy, Sight and Life advocates with its partners the global fight against all forms of malnutrition and micronutrient deficiencies.

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 2017.

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. Development projects under construction are included under 'Development projects'.

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 net 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. Any other results at DSM in relation to associated companies are recognized under Other results related to associates and joint ventures. DSM's interest in an associate or joint venture is carried in the balance sheet at its share in the net assets of the associate or joint venture 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 the income statement. 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 fair 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 contribute 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

Revenues from the sale of goods or the rendering of services are recognized upon the transfer of ownership or risk to the buyer. They are measured at the fair value of the consideration received. Net sales represent the invoice value less estimated rebates and cash discount, and excluding indirect taxes.

Income relating to the sale or licensing of technologies or technological expertise is recognized in the income statement according to the contractually agreed transfer of the rights and obligations associated with those technologies. This income is reported in Net sales when the income is part of the ordinary and recurring activities of the business and, if not, in Other operating income. 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 CO₂ 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)

DSM uses Alternative performance measures to present and discuss DSM's financial results. To arrive at these APMs, adjustments are made 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 with 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 203.

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 2017, no new or amended standards that had an impact on the financial position, performance or disclosures of DSM had to be applied for the first time. Neither were new or amended standards adopted early and applied in 2017 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'

IFRS 9 will replace IAS 39 'Financial Instruments: Recognition and Measurement'. IFRS 9 will mainly impact the classification, measurement, and (de-)recognition of financial assets and financial liabilities; the impairment of financial assets by introducing an expected credit loss model; and DSM's hedge accounting practices.

The new standard is effective for annual reporting periods beginning on or after 1 January 2018.

Classification and Measurement

IFRS 9 contains three principal categories to classify financial assets: measured at amortized cost, fair value through other comprehensive income ('FVOCI'), and fair value through profit and loss ('FVTPL'). As such, IFRS 9 eliminates the existing IAS 39 categories of held to maturity, loans and receivables, and available for sale securities. The categorization under IFRS 9 takes place based on the business model for managing the financial assets and the contractual cash flow characteristics of the financial asset.

DSM assessed that the new classification and measurement requirements mainly affect its other participations, currently reported under 'Other financial assets'. Under its current accounting policies, DSM accounts for other participations as available-for-sale securities measured against fair value, with changes in fair value being recognized in OCI or at cost (see 'Other financial assets', page 187). Under IFRS 9, these other participations shall initially be measured at FVTPL. However, DSM will use the irrevocable election to present subsequent changes in the fair value, impairment losses, and gains or losses on disposal of these investments in OCI. Given the limited amount of other financial assets measured at cost the impact of re-measuring these assets to fair value is expected to be limited. The re-measurement to fair value of those instruments as per 1 January 2018 has not been completed.

For all other financial assets and financial liabilities, DSM assessed that the requirements in IFRS 9 will not significantly affect their classification and measurement. Financial instruments currently classified as held to maturity and measured at amortized cost will also be measured at amortized cost under IFRS 9; and financial instruments currently measured at FVTPL will continue to be measured on the same basis.

Impairment

Under IFRS 9, the 'incurred credit loss' model currently applied will be replaced by an expected credit loss (ECL) model. The application of the ECL model will result in the recognition of a small and therefore insignificant default credit loss risk for loans to third parties and associated parties. For trade receivables, the transition to the new model under the simplified approach will also not have a significant impact on the valuation.

Hedge Accounting

When initially applying IFRS 9, a company may choose as its accounting policy to continue to apply the hedge accounting requirements of IAS 39 instead of the requirements in IFRS 9. DSM has chosen to apply the new requirements of IFRS 9. IFRS 9 requires DSM to ensure that hedge accounting relationships are aligned with DSM's risk management objectives and strategy and to apply a more qualitative and forward-looking approach to assessing hedge effectiveness. IFRS 9 also introduces new requirements on rebalancing hedge relationships and prohibiting voluntary discontinuation of hedge accounting. Under the new model, it is possible that more risk management strategies, particularly those involving hedging a risk component (other than foreign currency risk) of a non-financial item, will be likely to qualify for hedge accounting.

Transition

DSM will apply the new rules under IFRS 9 retrospectively from 1 January 2018. The group will use the practical expedient allowing it not to restate comparative information for prior periods with respect to classification and measurement changes.

IFRS 15 'Revenue from Contracts with Customers'

IFRS 15 provides a comprehensive framework for revenue recognition. The main principle underlying this new standard is that revenue is recognized upon the transfer of control of goods and services to the customer. IFRS 15 replaces the current accounting standards on revenue recognition, including IAS 11 'Accounting for Construction Contracts' and IAS 18 'Revenue'. The new standard is effective for annual reporting periods beginning on or after 1 January 2018.

The implementation of IFRS 15 affects both the timing of the revenue recognition and the amount of revenue recognized within DSM's revenue categories as outlined below. DSM's main revenue categories are 'goods sold', 'services rendered', and 'royalties from ordinary activities'.

During 2017, DSM performed a detailed impact assessment of IFRS 15 on its consolidated financial statements. DSM will adopt IFRS 15 using the cumulative effect method. Under this transition method, the cumulative impact of the adoption should be recognized in retained earnings as of 1 January 2018 and the comparatives will not be restated. DSM's assessment indicates that the initial effect of applying this

standard will be immaterial. Also the new requirements under IFRS 15 will not have a significant impact on revenue recognition compared to the current policy of revenue recognition.

IFRS 16 'Leases'

IFRS 16 establishes a new model for lessee accounting that requires a lessee to recognize right-of-use assets and lease liabilities for the rights and obligations created by leases. Additionally, the nature of expenses related to leases will change, as IFRS 16 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities. Furthermore, the classification of cash flows will also be affected as operating lease payments under IAS 17 are presented as operating cash flows; whereas under the IFRS 16 model, the lease payments will be split into a principal and an interest portion which will both be presented as financing cash flows. The new standard is effective for annual reporting periods beginning on or after 1 January 2019.

During 2017, DSM performed a preliminary impact assessment of IFRS 16 on its consolidated financial statements, but the company has not yet completed its detailed assessment. The standard will primarily affect the accounting for DSM's operating leases. The impact assessment performed indicates that the majority of these arrangements will meet the definition of a lease under IFRS 16, and hence DSM will recognize a lease liability and a corresponding right-of-use asset in respect of these leases. Based on the preliminary impact assessment of IFRS 16, DSM expects that the recognition of the leases will result in an impact of around 2% of the balance sheet total. Yet the actual impact of applying IFRS 16 on the financial statements in the period of initial application will depend on future economic conditions, including DSM's borrowing rate at 1 January 2019, the composition of DSM's lease portfolio at that date, DSM's latest assessment of whether it will exercise any lease renewal options, and the extent to which DSM chooses to use practical expedients and recognition exemptions, as well as the transition approach.

New IFRIC interpretations are not expected to have a material effect on the financial statements of DSM.

Consolidated financial statements

Consolidated income statement

x € million	Notes	2017			2016		
		Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Net sales	5	8,632	-	8,632	7,920	-	7,920
Cost of sales	5	(5,699)	-	(5,699)	(5,262)	-	(5,262)
Gross margin		2,933	-	2,933	2,658	-	2,658
Marketing and sales		(1,221)	-	(1,221)	(1,132)	-	(1,132)
Research and development		(334)	-	(334)	(309)	-	(309)
General and administrative		(524)	-	(524)	(552)	-	(552)
Other operating income		104	-	104	109	-	109
Other operating expense		(112)	-	(112)	(89)	(28)	(117)
	5	(2,087)	-	(2,087)	(1,973)	(28)	(2,001)
Operating profit		846	-	846	685	(28)	657
Financial income	6	35	-	35	23	-	23
Financial expense	6	(139)	-	(139)	(156)	-	(156)
Profit before income tax expense		742	-	742	552	(28)	524
Income tax expense	7	(115)	-	(115)	(89)	-	(89)
Share of the profit of associates and joint ventures	10	(83)	-	(83)	(38)	-	(38)
Other results related to associates and joint ventures	10	1,237	-	1,237	232	-	232
Profit for the year		1,781	-	1,781	657	(28)	629
Of which:							
Profit attributable to non-controlling interests	17	12	-	12	8	-	8
Net profit attributable to equity holders of Koninklijke DSM N.V.		1,769	-	1,769	649	(28)	621
Dividend on cumulative preference shares		(8)	-	(8)	(4)	-	(4)
Net profit available to holders of ordinary shares		1,761	-	1,761	645	(28)	617
Earnings per share (EPS) (in €):							
- Net basic EPS	2	10.07	-	10.07	3.68	(0.16)	3.52
- Net diluted EPS	2	10.04	-	10.04	3.67	(0.16)	3.51

Please refer to Note 2 'Alternative performance measures' for the reconciliation to Adjusted EBITDA of €1,445 million (2016: €1,262 million) and other adjusted IFRS performance measures.

Consolidated statement of comprehensive income

x € million	2017	2016
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit pension plans	83	(8)
Exchange differences on translation of foreign operations relating to the non-controlling interests	(8)	-
Equity accounted investees - share of Other comprehensive income	-	(6)
Items that may subsequently be reclassified to profit or loss		
Exchange differences on translation of foreign operations		
- Change for the year	(610)	216
- Reclassification adjustment to the income statement related to discontinued operations	(14)	(19)
Fair value reserve		
- Change for the year	(3)	7
Hedging reserve		
- Change for the year	98	(52)
- Reclassification adjustment to the income statement	(39)	52
- Reclassification adjustment to deferred items	-	(4)
Equity accounted investees - share of Other comprehensive income	4	(1)
Other comprehensive income, before tax	(489)	185
Income tax (expense)/income relating to:		
- Remeasurements of defined benefit plans	(9)	5
- Exchange differences on translation of foreign operations	(9)	1
- Hedging reserve	(7)	2
Total income tax (expense) / income	(25)	8
Other comprehensive income, net of tax	(514)	193
Profit for the year	1,781	629
Total comprehensive income	1,267	822
Of which:		
- Attributable to non-controlling interests	4	8
- Attributable to equity holders of Koninklijke DSM N.V.	1,263	814

Consolidated balance sheet at 31 December

x € million	Notes	2017	2016 ¹
Assets			
Non-current assets			
Intangible assets	8	3,058	3,188
Property, plant and equipment	9	3,313	3,325
Deferred tax assets	7	281	355
Share in associates and joint ventures	10	227	586
Financial derivatives	23	16	-
Other financial assets	11	475	463
		7,370	7,917
Current assets			
Inventories	12	1,848	1,800
Trade receivables	13	1,542	1,504
Income tax receivables	13	55	62
Other current receivables	13	93	87
Financial derivatives	23	41	40
Current investments	14	954	944
Cash and cash equivalents	15	899	604
		5,432	5,041
Total		12,802	12,958
Equity and liabilities			
Equity			
Shareholders' equity	16	6,962	6,072
Non-controlling interests	17	103	108
		7,065	6,180
Non-current liabilities			
Deferred tax liabilities	7	259	278
Employee benefits liabilities	24	356	490
Provisions	18	151	128
Borrowings	19	2,551	2,552
Financial derivatives	23	4	14
Other non-current liabilities	20	188	158
		3,509	3,620
Current liabilities			
Employee benefits liabilities	24	39	40
Provisions	18	53	54
Borrowings	19	77	853
Financial derivatives	23	20	239
Trade payables	21	1,452	1,376
Income tax payables	21	51	56
Other current liabilities	21	536	540
		2,228	3,158
Total		12,802	12,958

¹ Financial derivatives were previously assigned to Current assets and liabilities. These figures have now been distributed over Non-current and Current assets and liabilities, based on the contractual term.

Consolidated statement of changes in equity (Note 16)

x € million	Share capital	Share premium	Treasury shares	Other reserves	Retained earnings	Total	Non-controlling interests	Total equity
Balance at 1 January 2016	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 / canceled	-	-	-	(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
Dividend	-	-	-	-	(320)	(320)	(3)	(323)
Options / performance shares granted	-	-	-	26	-	26	-	26
Options / performance shares exercised / canceled	-	-	-	(22)	22	-	-	-
Proceeds from reissued shares	-	-	238	-	(5)	233	-	233
Change in DSM's share in subsidiaries	-	-	-	-	-	-	(6)	(6)
Repurchase of shares	-	-	(297)	-	-	(297)	-	(297)
Reclassification	-	-	-	(18)	18	-	-	-
Other	-	-	-	-	(15)	(15)	-	(15)
Total comprehensive income	-	-	-	(581)	1,844	1,263	4	1,267
Balance at 31 December 2017	338	489	(398)	(199)	6,732	6,962	103	7,065

Consolidated cash flow statement (Note 26)

x € million	2017	2016
<i>Operating activities</i>		
Profit for the year	1,781	629
Share of the profit of associates and joint ventures	(1,154)	(194)
Income tax	115	89
Profit before income tax expense	742	524
Financial income and expense	104	133
Operating profit ¹	846	657
Depreciation, amortization and impairments	502	489
Earnings before interest, tax, depreciation and amortization (EBITDA) ¹	1,348	1,146
Adjustments for:		
- (Gain) or loss from disposals	(5)	(3)
- Acquisition/divestment related in EBITDA	2	15
- Change in provisions	(3)	20
- Defined benefit plans	(61)	(27)
	(67)	5
Income tax received	15	7
Income tax paid	(81)	(84)
Other	18	33
Changes, excluding working capital	(115)	(39)
Operating cash flow before changes in working capital	1,233	1,107
Changes in operating working capital:		
- Inventories	(201)	(138)
- Trade receivables	(121)	(115)
- Trade payables	127	195
	(195)	(58)
Changes in other working capital	(42)	(31)
Changes in working capital	(237)	(89)
Cash provided by operating activities	996	1,018

¹ Please refer to Note 2 'Alternative performance measures' for the reconciliation to Adjusted EBITDA of € 1,445 million (2016: € 1,262 million) and other adjusted IFRS performance measures.

Consolidated cash flow statement (Note 26) continued

x € million	2017	2016
Cash provided by operating activities	996	1,018
<i>Investing activities</i>		
Capital expenditure for: ¹		
- Intangible assets	(98)	(63)
- Property, plant and equipment	(449)	(413)
Payments regarding drawing rights	(8)	(19)
Proceeds from disposal of property, plant and equipment	11	4
Acquisition of subsidiaries and associates	(242)	4
Cash from net investment hedge	(21)	-
Disposal of subsidiaries, businesses and associates	1,525	80
Additions to fixed-term deposits	(1,319)	(936)
Withdrawal from fixed-term deposits	1,286	-
Interest received	30	40
Other financial assets:		
- Capital payments and acquisitions	(98)	(35)
- Dividends received	4	152
- Additions to loans granted	(23)	(19)
- Repayment of loans granted	81	8
- Proceeds from disposals	10	3
Cash from/(used in) investing activities	689	(1,194)
<i>Financing activities</i>		
Settlement derivatives internal loans	(28)	-
Capital payments from/to non-controlling interests	3	6
Loans taken up	14	749
Repayment of loans	(818)	(4)
Change in debt to credit institutions	10	(11)
Repayment of commercial paper	-	(150)
Dividend paid	(200)	(190)
Interest paid	(135)	(151)
Proceeds from reissued treasury shares	107	137
Repurchase of shares	(297)	(273)
Cash (used in)/from financing activities	(1,344)	113
Change in cash and cash equivalents	341	(63)
Cash and cash equivalents at 1 January	604	665
Exchange differences relating to cash held	(46)	2
Cash and cash equivalents at 31 December	899	604

¹ An amount of €1 million included in capital expenditure was funded by customers (2016: €1 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 mainly of goodwill and development projects requires judgments by management, among others with respect to the determination of CGUs, the estimation of future cashflows, 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 financial statements are listed below for the most important currencies.

1 euro =	Exchange rate at balance sheet date		Average exchange rate	
	2017	2016	2017	2016
US dollar	1.20	1.05	1.13	1.11
Swiss franc	1.17	1.07	1.11	1.09
Pound sterling	0.89	0.85	0.88	0.82
Brazilian real	3.97	3.41	3.61	3.86
Chinese renminbi	7.80	7.29	7.63	7.34

Presentation of consolidated income statement

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.

The discontinued operations in the consolidated income statement relate to the disposal of the caprolactam, acrylonitrile and composite resins businesses.

2 Alternative performance measures (APMs)

In presenting and discussing DSM's financial position, operating results and net results, 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.

To provide clear reporting on the underlying developments of the business, APM adjustments are made that impact the EBIT(DA), net profit, ROCE and the EPS. A reconciliation of these Alternative performance measures to the most directly comparable IFRS measures can be found on page 167.

The APM adjustments to net profit, as included in the APMs, can be specified as follows:

	2017			2016		
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
APM adjustments:						
- Acquisitions/divestments	11	-	11	(13)	28	15
- Restructuring	60	-	60	101	-	101
- Other	26	-	26	-	-	-
- Impairments of PPE, intangible assets and business activities	14	-	14	18	-	18
- Income tax related to adjustments	(28)	-	(28)	(31)	-	(31)
- Adjustments to result in associates and joint ventures	(1,158)	-	(1,158)	(212)	-	(212)
Total APM adjustments (income)/expense	(1,075)	-	(1,075)	(137)	28	(109)

2017

The APM adjustments in 2017 are listed below:

- Restructuring costs of €60 million relate to project costs of the restructuring projects together with the redundancy schemes connected to the dismissal of employees and costs of termination of contracts.
- Acquisition and divestment costs of €11 million relate to acquisition costs of €4 million for among others Amyris Brasil and Twilmij, and the divestment costs for Innovative Synthesis Research of €7 million.
- The other APM adjustments of €26 million relate mainly to the demolition of buildings (€15 million), and some site closure and relocation costs (€11 million).
- The impairments of property, plant and equipment (PPE) and intangible assets of €14 million mainly relate to asset impairments within DSM Food Specialties (€4 million), DSM Bio-based Products & Services (€11 million) and an asset write-off of a plant of DSM Nutritional Products in China (€7 million), offset by some reversals of impairments within DSM Resins & Functional Materials (€8 million).
- APM adjustments to the result from associates mainly relate to a gain on the sale of the shares in Patheon N.V. of €1,250 million, offset by an impairment of the joint venture POET-DSM of €65 million and other associated companies of €30 million in total. See Note 10 for further details.

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 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 the result from 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).

Alternative performance measures

	2017			2016		
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Operating profit	846	-	846	685	(28)	657
Depreciation, amortization and impairments	502	-	502	489	-	489
EBITDA	1,348	-	1,348	1,174	(28)	1,146
APM adjustments to EBITDA:						
- Acquisitions/divestments	11	-	11	(13)	28	15
- Restructuring	60	-	60	101	-	101
- Other	26	-	26	-	-	-
Total APM adjustments	97	-	97	88	28	116
Adjusted EBITDA	1,445	-	1,445	1,262	-	1,262
Operating profit	846	-	846	685	(28)	657
APM adjustments to Operating profit:						
- APM adjustments to EBITDA	97	-	97	88	28	116
- Impairments of PPE and intangible assets	14	-	14	18	-	18
Total APM adjustments	111	-	111	106	28	134
Adjusted operating profit	957	-	957	791	-	791
Net profit	1,781	-	1,781	657	(28)	629
APM adjustments to:						
- Operating profit	111	-	111	106	28	134
- Result relating to associates/joint ventures	(1,158)	-	(1,158)	(212)	-	(212)
Income tax related to APM adjustments	(28)	-	(28)	(31)	-	(31)
Total APM adjustments	(1,075)	-	(1,075)	(137)	28	(109)
Adjusted net profit	706	-	706	520	-	520
Profit attributable to non-controlling interests	(12)	-	(12)	(8)	-	(8)
Dividend on cumulative preference shares	(8)	-	(8)	(4)	-	(4)
Adjusted net profit available to holders of ordinary shares	686	-	686	508	-	508
Earnings per share						
Average number of ordinary shares outstanding (x 1,000)			174,795			175,100
Effect of dilution due to share options (x 1,000)			683			603
Adjusted average number of ordinary shares outstanding (x 1,000)			175,478			175,703
Earnings per share (EPS) (in €):						
- Net basic EPS	10.07	-	10.07	3.68	(0.16)	3.52
- Net diluted EPS	10.04	-	10.04	3.67	(0.16)	3.51
- Adjusted net basic EPS	3.92	-	3.92	2.90	-	2.90
- Adjusted net diluted EPS	3.91	-	3.91	2.89	-	2.89

	2017	2016
Alternative performance measures		
Capital employed		
Intangible assets	3,058	3,188
Property, plant and equipment	3,313	3,325
Investment grants / drawing rights	(104)	(109)
Inventories	1,848	1,800
Current receivables	1,690	1,653
Current liabilities	(2,039)	(1,972)
Other	-	4
Capital employed at 31 December	7,766	7,889
Average capital employed		
Capital employed at 1 January	7,889	7,553
Capital employed at 31 March	7,913	7,456
Capital employed at 30 June	7,692	7,616
Capital employed at 30 September	7,620	7,620
Capital employed at 31 December	7,766	7,889
Average capital employed	7,776	7,627
Adjusted operating profit	957	791
Average capital employed	7,776	7,627
ROCE in %	12.3%	10.4%

3 Change in the scope of the consolidation

Acquisitions

On 3 January 2017, DSM acquired 100% of the shares of Sunshine (Suzhou Sunshine New Materials Technology Co., Ltd.)— the manufacturer of a novel, high-performance solar photovoltaic (PV) backsheet based on co-extrusion technology.

Through this acquisition, DSM has expanded its product portfolio for the solar PV market to include polymer backsheets that protect PV solar cells. The total consideration amounts to €38 million, consisting of a cash payment of €17 million at closing of the deal, and an estimate of future variable earn-out payments of €21 million (discounted; the undiscounted amount is €28 million). The share purchase agreement stipulates four earn-out payments dependent on Sunshine's financial performance during March 2016 to February 2020. In accordance with IFRS 3, the purchase price of Sunshine has been allocated to identifiable assets and liabilities acquired. The resulting goodwill amounted to €17 million. The key components within the goodwill are future technology, future customer relationships as well as assembled workforce. The Purchase Price Allocation (PPA) of Sunshine was finalized in the course of the year. The acquisition of Sunshine contributed €5 million to net sales and -€1 million to EBITDA in 2017.

On 29 September 2017, DSM Hydrocolloids acquired a controlling interest of 59.5% in Inner Mongolia Rainbow Biotechnology Co., Ltd. by purchasing 59.5% of the shares. This company is a high-tech enterprise focusing on the research and production of application innovations of microbial polysaccharides and other biological gums. Via an additional capital payment in November 2017, DSM now owns 65%, with a non-controlling interest held by our partner, the founder of the company. The total consideration amounts to €11 million, paid in cash at closing of the deal. In accordance with IFRS 3, the purchase price has been allocated to identifiable assets and liabilities acquired. The resulting provisional goodwill amounted to €14 million. The PPA is ongoing. The acquisition contributed €1 million to net sales and €0 million to EBITDA in 2017.

On 1 November 2017, DSM Nutritional Products acquired 100% of the shares of Twilmij B.V., a Dutch nutritional solutions company in the animal feed sector. The acquisition of Twilmij further strengthens DSM's foothold in the Northwest-European markets. The total consideration amounts to €65 million, consisting of a cash payment of €60 million at closing of the deal, and an estimate of

future variable earn-out payments of € 5 million. The earn-out value consists of four conditional payments, due on or before 28 February 2020, mainly dependent on growth of production, net sales and gross margin. In accordance with IFRS 3, the purchase price of Twilmij has been allocated to identifiable assets and liabilities acquired. The resulting provisional goodwill amounted to € 43 million, representing the value for the innovation capability and assembled workforce. The PPA is ongoing and is expected to result in a re-allocation from goodwill to intangible assets relating to customer relations and brands. The acquisition of Twilmij contributed € 14 million to net sales and € 2 million to EBITDA in 2017.

On 21 December 2017, DSM Nutritional Products acquired 100% of the shares of BioCare Copenhagen A/S (Denmark) for a cash consideration of € 44 million. With the acquisition, DSM expands its offering in gut health ingredients with probiotics. BioCare Copenhagen is a privately-held company founded in 2012, focused on probiotics and specialized in microbial actives. BioCare Copenhagen has multi-market distribution agreements with a number of leading dietary supplements and pharmaceutical companies. In accordance with IFRS 3, the purchase price of BioCare Copenhagen has been allocated to identifiable assets and liabilities acquired. The resulting provisional goodwill amounted to € 43 million. The PPA is ongoing. The acquisition of BioCare Copenhagen did not contribute to net sales and EBITDA in 2017.

On 28 December 2017, DSM Nutritional Products acquired 100% of the shares of Amyris Brasil Ltda and established a long-term manufacturing partnership for Amyris' high-volume products. The consideration for Amyris Brasil Ltda (which owns and operates a production facility in Brazil) and intellectual property related to farnesene (a bio-based key intermediate for many applications) is € 89 million including an additional value share arrangement over a three-year period. DSM paid € 74 million in cash at closing, and recognized a net liability of € 15 million. In accordance with IFRS 3, the purchase price of Amyris Brasil has been allocated to identifiable assets and liabilities acquired. The resulting provisional goodwill amounted to € 41 million. The PPA is ongoing. The acquisition of Amyris Brasil did not contribute to net sales and EBITDA in 2017.

The impact of the acquisitions on DSM's consolidated balance sheet at the date of acquisition is shown in the following table.

Acquisitions 2017

	Amyris Brazil		Twilmij		Other		Total	
	Book value	Fair value	Book value	Fair value	Book value	Fair value	Book value	Fair value
<i>Assets</i>								
Intangible assets	23	23	-	-	13	36	36	59
Property, plant and equipment	26	26	16	16	21	21	63	63
Other non-current assets	18	18	-	-	6	6	24	24
Inventories	3	3	6	6	6	6	15	15
Receivables	12	12	8	8	5	5	25	25
Cash and cash equivalents	1	1	(1)	(1)	2	2	2	2
Total assets	83	83	29	29	53	76	165	188
Non-controlling interests	-	-	-	-	1	1	1	1
<i>Liabilities</i>								
Non-current liabilities	18	18	-	-	4	10	22	28
Current liabilities	17	17	7	7	31	31	55	55
Total non-controlling interests and liabilities	35	35	-	7	7	-	36	84
Net assets	48	48	22	22	17	34	87	104
Acquisition price (in cash)		74		60		88		222
Fair value of associate contributed		-		-		1		1
Acquisition price (payable earn-out)		15		5		21		41
Consideration		89		65		110		264
Elimination book value associate		-		-		(1)		(1)
Goodwill		41		43		75		159
Acquisition costs recognized in APM adjustments		1		-		2		3

Disposals

There were no material disposals in 2017.

Other changes

In 2017, DSM and Evonik established a joint operation for omega-3 fatty acid products from natural marine algae for animal nutrition.

DSM Nutritional Products and Evonik Nutrition & Care each hold a 50% share in the joint operation and will co-own the production facility, which is to be built at an existing site of Evonik in the US and is expected to come on stream in 2019. The joint operation plans to invest around USD 200 million in the facility (USD 100 million by each party over circa 2 years). The joint operation is named Veramaris and is headquartered in the Netherlands. DSM accounts for the assets, liabilities, revenues and expenses relating to Veramaris in accordance with IFRS 11 for joint operations.

4 Segment information

DSM's operating segments are Nutrition, Materials and the Innovation Center. DSM has segmented its operations per business activity from which revenues are earned and expenses incurred. These operating results are regularly reviewed by the entity's chief operating decision maker (CODM) to make decisions about resources to be allocated to the segment and assess its performance. DSM uses Adjusted EBITDA as the main indicator to evaluate the consolidated performance as well as the performance per segment. Discrete financial information is available for each identified segment. The accounting policies of the operating segments are the same as those described in the Significant Accounting Policies. Transactions between segments are generally executed at market-based prices. Interest revenue, interest expense, and income tax expense or income are not allocated to segments as these amounts are not included in the measure of segment profit or loss reviewed by the CODM, or otherwise regularly provided to the CODM.

Nutrition serves the global industries for animal feed, food and beverages, pharmaceuticals, infant nutrition, dietary supplements, and personal care. It does so by the production of pure active ingredients, their incorporation into sophisticated forms, and the provision of tailored premixes and forward solutions.

Materials is a global player in specialty plastics, which are used in components for the electrical and electronics, automotive, flexible food-packaging, and consumer goods industries. Furthermore, Materials is a global player in providing innovative, sustainable resins solutions for paints and industrial and optical fiber coatings, as well as the fiber Dyneema®.

The Innovation Center focuses on innovation and growth of DSM's existing core business through adjacent technologies via its Corporate Research Program as well as through the company's venturing and licensing activities. Additionally, it identifies and invests in new and innovative growth options, initially through the DSM Business Incubator. The Innovation Center is responsible for developing and extracting value from DSMs Emerging Business Areas.

At DSM, any consolidated activities outside the three reported segments are reported as 'Corporate Activities'. These mainly comprise operating and service activities as well as a number of costs that cannot be allocated to the clusters.

DSM does not have a single external customer that represents 10% or more of total sales.

Business segments

2017	Continuing operations					Total
	Nutrition	Materials	Innovation Center	Corporate Activities	Eliminations	
<i>Financial performance</i>						
Net sales	5,579	2,825	169	59	-	8,632
Supplies to other clusters	52	10	22	-	(84)	-
Supplies	5,631	2,835	191	59	(84)	8,632
Adjusted EBITDA	1,053	488	9	(105)	-	1,445
EBITDA	1,022	485	10	(169)	-	1,348
Adjusted operating profit	770	361	(30)	(144)	-	957
Operating profit	728	367	(40)	(209)	-	846
Depreciation and amortization	280	125	25	34	-	464
Impairments	14	(8)	26	6	-	38
- of which included in APM adjustments	11	(9)	11	1	-	14
Additions to provisions	17	-	6	71	-	94
Result related to associates and joint ventures	-	-	(103)	1,257	-	1,154
R&D costs ¹	127	112	63	32	-	334
Wages, salaries and social security costs	955	327	78	296	-	1,656
<i>Financial position</i>						
Total assets	6,811	2,162	674	3,155	-	12,802
Total liabilities	1,900	696	70	3,071	-	5,737
Capital employed at year-end	5,420	1,786	562	(2)	-	7,766
Capital expenditure	407	124	43	12	-	586
Share in equity of associates and joint ventures	1	3	53	170	-	227
Adjusted EBITDA margin (in %)	18.9	17.3				16.7
<i>Workforce</i>						
Average in FTE	13,243	4,472	639	2,179	-	20,533
Year-end (headcount)	13,676	4,635	685	2,058	-	21,054

¹ 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.

Business segments

2016	Continuing operations					Total
	Nutrition	Materials	Innovation Center	Corporate Activities	Eliminations	
<i>Financial performance</i>						
Net sales	5,169	2,513	167	71	-	7,920
Supplies to other clusters	55	7	23	-	(85)	-
Supplies	5,224	2,520	190	71	(85)	7,920
Adjusted EBITDA	931	435	1	(105)	-	1,262
EBITDA	934	419	(5)	(174)	-	1,174
Adjusted operating profit	645	311	(24)	(141)	-	791
Operating profit	648	285	(38)	(210)	-	685
Depreciation and amortization	278	124	24	34	-	460
Impairments	8	10	9	2	-	29
- of which included in APM adjustments	-	10	8	-	-	18
Additions to provisions	4	15	3	77	-	99
Result related to associates and joint ventures	-	7	(24)	211	-	194
R&D costs ¹	104	109	64	32	-	309
Wages, salaries and social security costs	902	332	78	309	-	1,621
<i>Financial position</i>						
Total assets	6,935	2,207	826	2,990	-	12,958
Total liabilities	1,857	774	84	4,063	-	6,778
Capital employed at year-end	5,537	1,807	576	(31)	-	7,889
Capital expenditure	331	106	32	16	-	485
Share in equity of associates and joint ventures	1	2	133	450	-	586
Adjusted EBITDA margin (in %)	18.0	17.3				15.9
<i>Workforce</i>						
Average in FTE	13,168	4,453	613	2,275	-	20,509
Year-end (headcount)	13,260	4,460	619	2,447	-	20,786

¹ 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

	Continuing operations										Total
	The Netherlands	Rest of Western Europe	Eastern Europe	North America	Latin America	China	India	Japan	Rest of Asia	Rest of the world	
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
<i>Intangible assets and Property, plant and equipment</i>											
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
2017											
Net sales by origin											
In € million	2,193	2,560	182	1,430	669	1,023	82	123	286	84	8,632
In %	25	30	2	17	8	12	1	1	3	1	100
Net sales by destination											
In € million	316	2,074	564	1,918	1,059	1,116	200	299	821	265	8,632
In %	4	24	7	22	12	13	2	3	10	3	100
Workforce at year-end (headcount)	3,831	4,905	504	3,264	2,078	4,593	537	195	870	277	21,054
Average workforce (FTE)	3,735	4,676	469	3,204	2,066	4,572	504	194	846	267	20,533
<i>Intangible assets and Property, plant and equipment</i>											
Capital expenditure	134	209	4	126	45	53	4	2	6	3	586
Carrying amount	1,674	1,692	31	1,864	387	547	19	37	97	23	6,371
Total assets (total DSM)	4,656	2,530	141	2,739	877	1,110	104	139	403	103	12,802

5 Net sales and costs

Net sales

	2017	2016
Continuing operations		
Goods sold	8,451	7,724
Services rendered	173	188
Royalties	8	8
Total	8,632	7,920

Total costs

In 2017, total operating costs amounted to € 7.8 billion, € 0.6 billion higher than in 2016, when these costs stood at € 7.2 billion. Total operating costs in 2017 included Cost of sales amounting to € 5.7 billion (2016: € 5.3 billion); gross margin as a percentage of net sales stood at 34% (2016: 34%).

Employee benefits costs

	2017	2016
Continuing operations		
Wages and salaries	1,452	1,420
Social security costs	181	177
Pension costs (see also Note 24)	112	131
Share-based compensation (see also Note 27)	23	24
Total	1,768	1,752

Depreciation, amortization and impairments

	2017	2016
Continuing operations		
Amortization of intangible assets	146	143
Depreciation of property, plant and equipment	318	317
Impairment losses	38	29
Total	502	489

Other operating income

	2017	2016
Continuing operations		
Release of provisions	6	19
Gain on sale of assets and activities	20	6
Insurance benefits	4	31
Amendments/settlements pension plans	20	18
Earn-out payments and other settlements	28	16
Sundry	26	19
Total	104	109

Other operating expense

	2017	2016
Continuing operations		
Additions to provisions	87	74
Exchange differences	8	1
Acquisitions	3	2
Sundry	14	12
Total	112	89

6 Financial income and expense

	2017	2016
<i>Continuing operations</i>		
<i>Financial income</i>		
Interest income	11	23
Fair value change commodity hedges	14	-
Unwinding discounted receivables	10	-
Total financial income	35	23
<i>Financial expense</i>		
Interest expense	(125)	(121)
Interest relating to defined benefit plans	(8)	(10)
Capitalized interest during construction	3	3
Exchange differences	(4)	(6)
Unwinding discounted payables	(3)	(7)
Sundry	(2)	(15)
Total financial expense	(139)	(156)
Financial income and expense	(104)	(133)

As of July 2017, the interest rate applied in the capitalization of interest during construction decreased from 5% to 4% (2016: 5%).

7 Income tax

The income tax expense on the total result was € 115 million, which represents an effective income tax rate of 15.5% (2016: € 89 million, representing an effective income tax rate of 17.0%) and can be broken down as follows:

	2017	2016
<i>Current tax expense:</i>		
- Current year	(78)	(113)
- Prior-year adjustments	(4)	(10)
- Tax credits compensated	2	3
- Non-recoverable withholding tax	(1)	(2)
	(81)	(122)
<i>Deferred tax expense:</i>		
- Originating from temporary differences and their reversal	(19)	79
- Prior-year adjustments	2	7
- Change in tax rate	25	(4)
- Changes arising from (reversal of) write-down deferred tax assets	9	(17)
- Other changes in tax losses and tax credits	(51)	(32)
	(34)	33
Total	(115)	(89)
<i>Of which related to:</i>		
- Adjusted taxable result	(143)	(120)
- APM adjustments	28	31

The effective tax rate on the Adjusted taxable result was 16.8% in 2017 (2016: 18.3%). This decrease was mainly due to the adjusted federal tax rate in the US, following the new tax reform. 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 %	2017	2016
Domestic income tax rate	25.0	25.0
Tax effects of:		
- Deviating rates	(4.6)	(5.4)
- Rate change US tax reform	(3.0)	-
- Tax-exempt income and non-deductible expense	(0.5)	(0.3)
- Other effects	(0.1)	(1.0)
Effective tax rate Adjusted taxable result, continuing operations	16.8	18.3
Discontinued operations	-	(1.1)
APM adjustments (see Note 2)	(1.3)	(0.2)
Total effective tax rate	15.5	17.0

The balance of deferred tax assets and deferred tax liabilities decreased by €55 million owing to the changes presented in the next table:

Deferred tax assets and liabilities		
	2017	2016
Balance at 1 January		
Deferred tax assets	355	366
Deferred tax liabilities	(278)	(319)
Total	77	47
Changes:		
- Income tax income/(expense) in income statement	(59)	33
- Income tax: change in tax percentage US (Federal Tax)	25	-
Income tax expense	(34)	33
- Income tax: sale of Patheon (see Note 10)	(22)	-
Total income statement	(56)	33
- Income tax expense in other comprehensive income	(25)	8
- Acquisitions and disposals	(5)	(3)
- Exchange differences	22	(12)
- Transfer	9	4
Balance at 31 December	22	77
Of which:		
- Deferred tax assets	281	355
- Deferred tax liabilities	(259)	(278)

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:

	2017		2016	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets	14	(152)	13	(209)
Property, plant and equipment	22	(159)	18	(200)
Financial assets	9	(8)	3	(1)
Inventories	53	(33)	71	(22)
Receivables	5	(17)	5	(5)
Equity	1	(1)	1	(3)
Other non-current liabilities	19	(1)	18	(1)
Non-current provisions	74	(3)	95	(6)
Other current liabilities	70	(12)	95	(3)
	267	(386)	319	(450)
Tax losses carried forward	141	-	208	-
Set-off	(127)	127	(172)	172
Total	281	(259)	355	(278)

No deferred tax assets were recognized for loss carryforwards amounting to €211 million (2016: €216 million). Unrecognized loss carryforwards amounting to €77 million will expire in the years up to and including 2022 (2016: €74 million up to and including 2021), €72 million between 2023 and 2027 (2016: €77 million between 2022 and 2026) and the remaining €63 million between 2028 and 2032 (2016: €65 million between 2027 and 2031).

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. 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.

8 Intangible assets

	Goodwill	Licenses and patents	Under construction	Development projects	Other	Total
<i>Balance at 1 January 2016</i>						
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 obligations	-	-	-	-	(88)	(88)
- Other 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)
<i>Balance at 31 December 2016</i>						
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
Changes in carrying amount:						
- Capital expenditure	-	-	26	70	2	98
- Put into operation	-	32	(68)	-	36	-
- Acquisitions	159	21	23	-	15	218
- Amortization	-	(11)	-	(7)	(128)	(146)
- Impairment losses	(3)	(11)	-	(11)	(9)	(34)
- Exchange differences	(181)	(10)	(6)	-	(70)	(267)
- Other reclassifications	-	-	(14)	30	(15)	1
	(25)	21	(39)	82	(169)	(130)
<i>Balance at 31 December 2017</i>						
Cost	1,950	225	66	215	1,657	4,113
Amortization and impairment losses	17	100	-	33	905	1,055
Carrying amount	1,933	125	66	182	752	3,058

The amortization of intangible assets is included in Cost of sales, Marketing and sales, Research and development and General and administrative expenses.

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 impairment losses of € 34 million mainly relate to acquisition-related assets and development projects at DSM Innovation Center and DSM Food Specialties. See also Note 2 'Alternative performance measures'.

The breakdown of the carrying amount of goodwill at year-end 2017 is as follows:

Goodwill per acquisition

Acquisition	2017	2016	Cash generating unit	Functional Currency	Year of acquisition
Martek	387	444	DSM Nutritional Products	USD	2011
NeoResins	358	358	DSM Resins & Functional Materials	EUR	2005
Fortitech	290	333	DSM Nutritional Products	USD	2012
Ocean Nutrition Canada	198	210	DSM Nutritional Products	CAD	2012
Kensey Nash	135	155	DSM Biomedical	USD	2012
Tortuga	102	118	DSM Nutritional Products	BRL	2013
The Polymer Technology Group	73	84	DSM Biomedical	USD	2008
Other acquisitions	390	256			
Total	1,933	1,958			

Goodwill per Cash generating unit

Cash generating unit	2017	2016
DSM Nutritional Products	1,189	1,198
DSM Resins & Functional Materials	383	386
DSM Biomedical	208	238
DSM Food Specialties	59	64
DSM Dyneema	40	44
DSM Advanced Solar	16	3
DSM Engineering Plastics	15	16
DSM Hydrocolloids	14	-
DSM Bio-based Products & Services	9	9
Total	1,933	1,958

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 are 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, updated on a yearly basis. 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. 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.

Key assumptions goodwill impairment tests

	2017	2016
Explicit forecast		
- Mature business	5	5
- Emerging business	10	10
Terminal value growth	1%	1%
Pre-tax discount rate		
- DSM Nutritional Products	8.4%	8.6%
- DSM Resins & Functional Materials	10.3%	11.2%
- DSM Biomedical	10.6%	10.5%
Organic sales growth		
DSM Nutritional Products		
- Year 1-5	4-9%	3-5%
- Year 6-10	2.4%	2.4%
DSM Resins & Functional Materials		
- Year 1-5	2-10%	3-5%
- Year 6-10	1.2%	1.2%
DSM Biomedical		
- Year 1-10	8.0%	7.7%

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.

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. Where in 2016 headroom for Biomedical was limited and the sensitivity test resulted in a risk of no headroom, for 2017 this is no longer the case.

The market capitalization of DSM at 31 December 2017 amounted to € 14,454 million (31 December 2016: € 10,334

million) and was clearly above the carrying amount of net assets, thus providing an additional indication that goodwill was not impaired.

Development costs

The carrying amount of development costs at 31 December 2017 included € 156 million mainly relating to strategic projects which are not being amortized yet. The recoverable amount of these CGUs was estimated based on the present value of the future cash flows expected to be derived from the CGUs (value-in-use). The recoverable amount of all CGUs was estimated to be higher than its carrying amount and no impairment was required.

Other intangible assets

	2017				2016
	Cost	Amortization	Carrying amount	Of which acquisition-related	Of which acquisition-related
Application software	258	(186)	72	4	11
Marketing-related	93	(26)	67	67	54
Customer-related	537	(242)	295	249	275
Technology-based	460	(376)	84	63	188
Drawing rights	237	(39)	198	-	-
Other	72	(36)	36	13	12
Total	1,657	(905)	752	396	540
Total 2016	1,748	(827)	921	540	

Other intangible assets include drawing rights contracts with the partnership ChemicalInvest. 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 2017, it had a carrying amount of € 198 million (2016: € 220 million) and a remaining useful life of 13 years,

and an amount of € 72 million was still payable to ChemicalInvest for the acquisition of the drawing rights (2016: € 74 million). Other intangible assets also include the customer relationships that were part of the Fortitech acquisition in 2012, with a carrying amount at the end of 2017 of € 99 million (2016: € 124 million). Furthermore, acquisition-related intangibles are included in the annual goodwill impairment test previously discussed in this section. These intangible assets are amortized on a straight-line basis, except for the intangible assets with an indefinite useful life, which amount to € 46 million (2016: € 52 million).

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 2016						
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 reclassifications	-	-	(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
Changes in carrying amount:						
- Capital expenditure	8	54	4	422	-	488
- Put into operation	71	183	16	(270)	-	-
- Acquisitions	12	48	1	2	-	63
- Disposals	(4)	(1)	(1)	-	-	(6)
- Depreciation	(73)	(226)	(19)	-	-	(318)
- Impairment losses	(5)	(7)	(2)	(1)	-	(15)
- Impairment reversals	-	11	-	-	-	11
- Exchange differences	(89)	(97)	(4)	(43)	-	(233)
- Other reclassification	2	(1)	1	(3)	-	(1)
- Other changes	-	-	-	(1)	-	(1)
	(78)	(36)	(4)	106	-	(12)
Balance at 31 December 2017						
Cost	2,070	4,177	219	613	14	7,093
Depreciation and impairment losses	889	2,726	157	-	8	3,780
Carrying amount	1,181	1,451	62	613	6	3,313

There were no material finance lease agreements in 2017 (as was the case in 2016).

In 2017, impairment losses of € 15 million were recognized on property, plant and equipment. See also Note 2 'Alternative performance measures'.

10 Associates and joint ventures

Material associates and joint ventures for DSM are DSM Sinochem Pharmaceuticals (DSP), Patheon, ChemicalInvest, and POET-DSM Advanced Biofuels. DSP was formed in 2011 as a fifty-fifty joint venture between DSM and Sinochem Group. DSP is the global leader in sustainable antibiotics, next-generation statins, and anti-fungals. DSP develops, produces, and sells intermediates, active pharmaceutical ingredients, and drug products. Patheon was formed in 2014 between DSM and JLL Partners, combining the businesses of DSM Pharmaceutical Products and Patheon. Patheon 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. DSM sold its interest in Patheon N.V. in 2017. ChemicalInvest is a leader in the production and supply of caprolactam, acrylonitrile, and composite resins. DSM has a 35% shareholding in the company. The joint venture between POET and DSM operates a start-up commercial-scale production facility for cellulosic bio-ethanol in the US.

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 has had a 35% interest and significant influence in ChemicalInvest since the formation of this partnership in July 2015. DSM accounts for this interest using the equity method as well. 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.

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. On 29 August 2017, the remaining shares in Patheon N.V. were sold to Thermo Fisher Scientific Inc.

DSM's share in its most important associates and joint ventures is disclosed below:

Company		2017	DSM interest 2016
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)	-	-	33.5%
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

	2017						2016
	Patheon N.V.	DSP	Chemica- Invest	POET-DSM	Other ¹	Total	
Share in associates and joint ventures							
Balance at 1 January	279	130	-	117	60	586	644
Changes:							
- Share in results	10	9	5	(100)	(20)	(96)	(47)
- Capital payments	-	-	-	43	17	60	33
- Dividend / capital repayments	-	-	-	-	(4)	(4)	(152)
- Disposals	(249)	-	-	-	-	(249)	128
- Consolidation changes	-	-	-	-	(4)	(4)	(10)
- Impairments	-	-	-	-	(20)	(20)	-
- Transfers	-	5	-	-	6	11	(27)
- Exchange differences	(41)	(4)	2	(12)	(3)	(58)	17
- Other	1	-	-	-	-	1	-
Total changes	(279)	10	7	(69)	(28)	(359)	(58)
Balance at 31 December	-	140	7	48	32	227	586
Loans to associates and joint ventures (see note 11)		12	181	-	-	193	253
Total balance at 31 December associates and joint ventures	-	152	188	48	32	420	839

¹ Among others Africa Improved Foods and Limburg Ventures are included in Other.

Profit of associates and joint ventures

	2017					2016
	Patheon ¹ N.V.	DSP	Chemica- Invest	POET-DSM	Other	
Profit for the year (100%)	28	19	82	(199)		
Non-controlling interest	-	-	(13)	-		
Net profit shareholders (100%)	28	19	69	(199)		
DSM's %-share in capital	-	50%	35%	50%		
Share in result based upon %-share	10	9	25	(100)	(20)	(76)
Share in losses in excess of investment	-	-	(20)	-	-	(20)
Share in result of associates and joint ventures	10	9	5	(100)	(20)	(96)
Tax on VoFs and LLCs	-	-	-	13	-	13
Share in result associates and JVs	10	9	5	(87)	(20)	(83)
Book profit Patheon	1,250	-	-	-	-	1,250
Other	3	-	3	-	(19)	(13)
Other result share in associates and JVs	1,253	-	3	-	(19)	1,237
Total result related to associates and JVs	1,263	9	8	(87)	(39)	1,154

¹ Period 1 November 2016 until 15 May 2017.

Loans include a € 41 million shareholder loan with an annual fixed interest rate of 9.875% and € 140 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 2019; a USD 50 million loan to POET-DSM with a 5% interest rate has been fully repaid in 2017.

Patheon is included from 1 November 2015 until the end of fiscal year 2016 (31 October) for 2016 and from 1 November 2016 until 15 May 2017 (transfer to assets held for sale at that date) for 2017. On 29 August 2017, DSM sold its 33.5% interest or 48.7 million shares in Patheon N.V. to Thermo Fisher Scientific Inc. as part of a tender offer to acquire all of the issued and outstanding shares of Patheon for USD 35.00 per ordinary share in cash. As a consequence, DSM realized a cash in-flow of € 1,535 million (investing activities) and a profit of € 1,250 million, which is recorded as Other results related to associates and joint ventures.

Divestment of share in Patheon

Book value associate	249
Earn-out receivable	32
Total book value	281
Consideration	1,503
Earn-out receivable	32
Total consideration	1,535
Book result	1,254
Income tax	(22)
Book result after tax	1,232
Release of translation reserve and hedging reserve to Income statement	18
Total transaction result in income statement	1,250

In 2016, the equity value of ChemicalInvest was -€ 74 million on a 100% basis, DSM decreased its carrying amount in this associate to zero and did not recognize any further losses on its investment in the associate, as DSM has no obligation to fund beyond its net interest in ChemicalInvest. In 2017, ChemicalInvest showed a very good financial recovery, which resulted in a net profit of € 82 million on a 100% basis, leading to a carrying amount of the investment for DSM of € 7 million.

At year-end the total assets of POET-DSM amounted to € 126 million (2016: € 293 million) on a 100% basis. 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. In the third quarter of 2017, an impairment test was carried out, triggered by the delays in the start-up together with the pre-treatment re-design. The impairment test based on the adjusted cashflows of the ten-year plan where the terminal growth rate was set at 1.5% (2016: 1.5%), and the pre-tax discount rate at 11.8% (2016: 12.3%), led to an impairment for DSM of € 65 million, which is included in 'Share of the profit of associates and joint ventures' and the value-in-use now equals the carrying amount. Nonetheless, POET-DSM Advanced Biofuels made progress in 2017 after a period of significant delays throughout the industry. In particular, progress was made in the development of advanced enzymes, which will now be manufactured on-site, as well as in yeast technology. The pre-treatment set-up has recently been re-designed, with the aim to improve performance.

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

	DSP		ChemicalInvest		POET-DSM		Other	
	2017	2016	2017	2016	2017	2016	2017	2016
Assets								
Intangible assets	32	26	76	107	-	-	17	8
Property, plant and equipment	199	219	261	270	110	279	130	87
Other non-current assets	24	28	125	137	6	-	31	24
Inventories	87	82	115	112	5	10	18	13
Receivables	145	142	342	366	2	3	30	13
Cash and cash equivalents	74	92	328	158	3	1	88	95
Other current assets	7	-	-	-	-	-	-	-
Total assets	568	589	1,247	1,150	126	293	314	240
Liabilities								
Provisions (non-current)	8	1	76	68	19	8	9	-
Borrowings (non-current)	38	15	596	561	4	48	58	45
Other non-current liabilities	8	9	82	127	-	-	8	2
Provisions (current)	-	-	32	87	-	-	3	-
Borrowings and financial derivatives (current)	88	144	101	78	1	-	32	14
Other current liabilities	141	154	344	303	5	4	42	43
Total liabilities	283	323	1,231	1,224	29	60	152	104
Net assets (100% basis)	285	266	16	(74)	97	233	162	136
Of which non-controlling interest	(5)	(5)	(9)	3	-	-	(16)	-
Net assets excluding goodwill	285	266	16	(74)	97	233	162	136
Contingent liabilities	-	5	-	54	-	-	-	-
Summarized statement of profit or loss								
Revenue (net sales)	440	431	1,933	1,802	8	2	72	43
Operating profit (EBIT)	42	34	156	(37)	(189)	(40)	(63)	(32)
Financial income	1	1	2	1	-	-	1	-
Financial expense	(8)	(12)	(69)	(52)	(3)	(3)	(6)	(4)
Share of the profit of associates	-	-	7	6	-	-	(2)	1
Profit before income tax expense	35	23	96	(82)	(192)	(43)	(70)	(35)
Income tax expense	(16)	(9)	(6)	(1)	(7)	(5)	5	(19)
Profit for the year (continuing operations)	19	14	90	(83)	(199)	(48)	(65)	(54)
Post-tax result discontinued operations	-	-	(8)	-	-	-	-	5
Profit for the year (total)	19	14	82	(83)	(199)	(48)	(65)	(49)
Other comprehensive income	-	-	-	-	-	-	-	-
Total comprehensive income	19	14	82	(83)	(199)	(48)	(65)	(49)
of which non-controlling interest	-	(1)	13	-	-	-	(10)	(18)
Adjusted EBITDA	73	62	205	105	(30)	(27)	(22)	(22)
EBITDA	73	62	205	23	(30)	(27)	(22)	(22)
Depreciation, amortization and impairment	(31)	(28)	(49)	(60)	(159)	(13)	(41)	(10)

11 Other financial assets

	Loans associates and joint ventures	Other participations	Other receivables	Other deferred items	Total
Balance at 1 January 2016	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
Changes:					
- Charged to the income statement	12	(8)	31	(6)	29
- Acquisitions	-	7	18	2	27
- Capital payments	-	47	-	-	47
- Disposals	-	(3)	-	-	(3)
- Loans granted / prepayments	-	-	49	-	49
- Repayments	(65)	-	(47)	-	(112)
- Consolidation changes	(2)	-	-	-	(2)
- Exchange differences	(4)	(4)	(9)	(1)	(18)
- Transfers	(1)	1	(2)	-	(2)
- Changes in fair value	-	(1)	-	-	(1)
- Other	-	-	1	(3)	(2)
Balance at 31 December 2017	193	89	177	16	475

For Loans associates and joint ventures, see also 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 €42 million included in Other participations relate to equity instruments measured at cost (2016: €26 million).

In 2017, DSM made an equity investment in Amyris, Inc., an industrial bioscience company in the US for an amount of €34 million, which is included under Capital payments.

Repayments of €47 million in Other receivables include the settlement of €32 million relating to the earn-out receivable of Patheon. See also Note 10 'Associates and joint ventures'.

12 Inventories

	2017	2016
Raw materials and consumables	517	504
Intermediates and finished goods	1,392	1,359
	1,909	1,863
Adjustments to lower net realizable value	(61)	(63)
Total	1,848	1,800

The carrying amount of inventories adjusted to net realizable value (before reclassification to held for sale) was €216 million (2016: €240 million).

At the end of 2017, there were no inventories reclassified to held for sale (2016: none).

Changes in the adjustment to net realizable value

	2017	2016
Balance at 1 January	(63)	(48)
Additions charged to income statement	(99)	(101)
Utilization/reversals	97	86
Exchange differences	4	-
Balance at 31 December	(61)	(63)

13 Current receivables

	2017	2016
Trade receivables		
Trade accounts receivable	1,528	1,490
Deferred items	29	24
Receivables from associates	6	15
	1,563	1,529
Adjustment for bad debts	(21)	(25)
Total Trade receivables	1,542	1,504
Income tax receivable	55	62
Other current receivables		
Other taxes and social security contributions	36	31
Employee related receivables	15	9
Acquisition related receivables	8	-
Loans	7	25
Receivables associates and joint ventures relating to cash facility	21	17
Other receivables	4	3
Deferred items	2	2
Total Other current receivables	93	87
Total current receivables	1,690	1,653

Deferred items comprised €31 million (2016: €26 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 €1,356 million (2016: €1,343 million) is provided on the next page. The remaining balance reported as Trade receivables amounting to €172 million (2016: €146 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 %	2017	2016
Neither past due nor impaired	80	82
1-29 days overdue	14	12
30-89 days overdue	5	3
90 days or more overdue	1	3

The changes in the allowance for doubtful accounts receivable are as follows:

	2017	2016
Balance at 1 January	(25)	(17)
Additions charged to income statement	(7)	(12)
Deductions	10	5
Exchange differences	1	(1)
Balance at 31 December	(21)	(25)

14 Current investments

	2017	2016
Fixed term deposits	954	944
Total	954	944

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 change in current investments is mainly due to the redemption of the € 750 million bond in October 2017, and the sale of Patheon shares in August 2017.

15 Cash and cash equivalents

	2017	2016
Deposits	282	33
Cash at bank and in hand	596	556
Payments in transit	19	10
Bills of exchange	2	5
Total	899	604

Cash at year-end 2017 was not being used as collateral and therefore was not restricted (2016: restricted for € 1 million). 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 € 116 million (2016: € 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 2017, the amount had decreased by € 43 million to € 19 million. See also Note 21 'Current liabilities'.

16 Equity

	2017	2016
Balance at 1 January	6,180	5,631
Net profit	1,781	629
Net exchange differences	(645)	197
Net actuarial gains/(losses) on defined benefit obligations	74	(9)
Dividend	(323)	(301)
Proceeds from reissue of ordinary shares	233	253
Repurchase of shares	(297)	(273)
Other changes	62	53
Balance at 31 December	7,065	6,180

After the balance sheet date, the following dividends were declared by the Managing Board:

Dividend		
	2017	2016
Per cumulative preference share A: €0.17 (2016: €0.17)	8	8
Per ordinary share: €1.85 (2016: €1.75)	323	306
Total	331	314

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 220.

Share capital

On 31 December 2017, the authorized capital amounted to €1,125 million (2016: €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 2016 and 2017 are shown in the following table.

Overview of shares

	Issued shares		Treasury shares
	Ordinary	Cumprefs A	Ordinary
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	
Balance at 1 January 2017	181,425,000	44,040,000	6,423,334
Reissue of shares in connection with share-based payments			(2,238,144)
Repurchase of shares			4,500,000
Dividend in the form of ordinary shares			(1,903,665)
Balance at 31 December 2017	181,425,000	44,040,000	6,781,525
Number of treasury shares at 31 December 2017	(6,781,525)	-	
Number of shares outstanding at 31 December 2017	174,643,475	44,040,000	

The average number of ordinary shares outstanding in 2017 was 174,794,656 (2016: 175,099,827). 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 2017, no cumulative preference shares B were outstanding.

Share premium

Of the total share premium of € 489 million (2016: € 489 million), an amount of € 101 million (2016: € 104 million) can be regarded as entirely free of tax.

Treasury shares

At 31 December 2017, DSM possessed 6,781,525 ordinary shares (nominal value € 10 million, 3.01% of the share capital). The average purchase price of the ordinary treasury shares was € 58.70. At 31 December 2017, 6,706,342 of the total number of treasury shares outstanding were held for servicing management and personnel share-option rights and share plans. The remainder, 75,183 shares, is the balance of the holding for this purpose at start of the year, the shares that were purchased under the company's share buy-back program in 2017 and shares that were reissued as stock dividend in 2017.

At 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. 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.

Other reserves in Shareholders' equity

	Translation reserve	Hedging reserve	Reserve for share-based compensation	Fair value reserve	Total
Balance at 1 January 2016	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/canceled	-	-	(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
Changes:					
Fair-value changes of derivatives	-	98	-	-	98
Release to income statement	(14)	(39)	-	-	(53)
Fair-value changes of other financial assets	-	-	-	(3)	(3)
Exchange differences	(610)	-	-	-	(610)
Options and performance shares granted	-	-	26	-	26
Options and performance shares exercised/canceled	-	-	(22)	-	(22)
Reclassification	-	-	(18)	-	(18)
Changes in joint ventures and associates	(4)	7	-	-	3
Income tax	(9)	(7)	-	-	(16)
Total changes	(637)	59	(14)	(3)	(595)
Balance at 31 December 2017	(107)	(148)	51	5	(199)

¹ Reclassification to retained earnings.

The decrease in the Translation reserve in 2017 is mainly caused by strengthening of the euro compared to the US dollar, Swiss franc, Chinese renminbi and the Brazilian real. As a consequence the value of the subsidiaries in those countries decreased, which led to a negative exchange difference of € 610 million. Next to this there was a € 14 million release of the cumulative translation reserve of Patheon to the income statement.

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

	2017			2016
	Andre Pectin	Other	Total	Total
% of non-controlling interest	71%			
Balance at 1 January	64	44	108	90
Changes:				
- Share of profit/charged to income statement	8	4	12	8
- Acquisitions	-	1	1	6
- Capital payments	-	3	3	9
- Dividend paid	-	(3)	(3)	(5)
- Change in ownership percentage	-	(9)	(9)	-
- Exchange differences	(5)	(3)	(8)	-
- Other	-	(1)	(1)	-
Total changes	3	(8)	(5)	18
Balance at 31 December	67	36	103	108

Not fully-owned subsidiaries on a 100% basis

	Andre Pectin		Other	
	2017	2016	2017	2016
<i>Assets</i>				
Intangible assets	22	26	32	38
Property, plant and equipment	26	28	159	197
Other non-current assets	-	-	29	27
Inventories	29	29	22	25
Receivables	46	23	63	56
Cash and cash equivalents	2	3	26	32
Total assets	125	109	331	375
<i>Liabilities</i>				
Provisions (non-current)	3	4	1	3
Borrowings (non-current)	-	-	15	23
Other non-current liabilities	-	-	23	26
Borrowings and financial derivatives (current)	3	3	70	85
Other current liabilities	24	12	80	80
Total liabilities	30	19	189	217
Net assets (100% basis)	95	90	142	158
Net sales	47	55	227	202
Profit for the year	11	13	11	(6)
Total comprehensive income	-	(1)	-	1
Operating cash flows	6	15	29	18
Dividend paid to non-controlling interests	-	-	3	5

18 Provisions

	Restructuring costs and termination benefits	Environmental costs	Other long-term employee benefits	Other provisions	Total
Balance at 1 January 2016	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
Changes in 2017:					
- Additions	30	27	2	35	94
- Releases	(2)	-	-	(4)	(6)
- Uses	(50)	(6)	(3)	(8)	(67)
- Exchange differences	(1)	-	(1)	(1)	(3)
- Other change	-	-	-	4	4
Total changes	(23)	21	(2)	26	22
Balance at 31 December 2017	39	70	42	53	204
Of which current	31	10	3	9	53

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 increased from 1.7% to 1.9%. The balance of provisions measured at present value increased by €0.3 million in 2017 in view of the passage of time (2016: increase of €0.7 million).

The provisions for restructuring costs and termination benefits mainly relate to the costs of redundancy schemes connected to the dismissal 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 demolition costs, 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 2017 mainly relate to the various restructuring projects (same as in 2016), in particular for the support functions (€ 16 million).

19 Borrowings

	2017		2016	
	Total	Of which current	Total	Of which current
Debtenture loans	2,542	-	3,290	749
Private loans	13	8	44	37
Finance lease liabilities	4	-	4	-
Credit institutions	69	69	67	67
Total	2,628	77	3,405	853

In agreements governing loans with a residual amount at year-end 2017 of €2,542 million, of which €0 million was of a short-term nature (31 December 2016: €3,290 million, of which €749 million was 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 May 2017, Moody's changed the outlook from negative to stable in relation to their A3 credit rating. Standard & Poor's confirmed DSM's credit rating in June 2017. At 31 December 2017, there was €1,746 million in borrowings outstanding with a remaining term of more than five years (at 31 December 2016, there was €2,245 million with a remaining term of more than five years).

The schedule of repayment of borrowings is as follows:

	2017	2016
2017	-	853
2018	77	6
2019	301	300
2020	-	1
2021 and 2022	504	-
After 2022	1,746	2,245
Total	2,628	3,405

A breakdown of the borrowings by currency is given in the following table:

	2017	2016
EUR	2,543	3,291
USD	20	38
CNY	16	5
TWD	-	50
BRL	45	10
Other	4	11
Total	2,628	3,405

On balance, total borrowings decreased by €777 million owing to the following changes:

	2017	2016
Balance at 1 January	3,405	2,810
Loans taken up	16	754
Repayments	(818)	(4)
Acquisitions	24	8
Changes in debt to credit institutions	2	(11)
Repayment of commercial paper	-	(150)
Exchange differences	(1)	(2)
Balance at 31 December	2,628	3,405

The average effective interest rate on the portfolio of borrowings outstanding in 2017, including hedge instruments related to these borrowings, amounted to 3.28% (2016: 3.40%).

A breakdown of debenture loans is given below:

Debenture loans					
			Nom.		
			amt.	2017	2016
EUR loan	5.25%	2007-2017	750	-	749
EUR loan	1.75%	2013-2019	300	300	300
EUR loan	2.38%	2014-2024	500	498	498
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	748	747
Total			3,300	2,542	3,290

All debenture loans have a fixed interest rate.

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.

The 0.75% EUR bond 2016-2026 of €750 million was pre-hedged by means of a collar resulting in an effective interest rate for this bond amounts at 1.08% including settlement of pre-hedge.

A breakdown of private loans is given below:

Private loans					
				2017	2016
TWD loan	floating	2013-2018		-	34
	(1 month)				
CNY loan	fixed	2018-2019		12	
Other loans				1	10
Total				13	44

DSM's policy regarding financial-risk management is described in Note 23.

20 Other non-current liabilities

	2017	2016
Investment grants	40	41
Deferred items	15	20
Drawing rights	69	68
Other non-current liabilities	64	29
Total	188	158

The increase in the non-current liabilities relates to earn-out agreements regarding the acquisition of Sunshine and Amyris Brasil and miscellaneous non-current liabilities regarding the acquisition of Amyris Brasil.

21 Current liabilities

	2017	2016
Trade payables		
Received in advance	4	6
Trade accounts payable	1,377	1,276
Notes and cheques due	3	5
Owing to associates and joint ventures	68	89
Total Trade payables	1,452	1,376
Income tax payable	51	56
Other current liabilities		
Other taxes and social security contributions	51	51
Interest	18	26
Pensions	10	4
Investment creditors	133	100
Employee-related liabilities	277	278
Payables associates and joint ventures relating to cash facility	19	62
Other liabilities	28	18
Deferred items	-	1
Total Other current liabilities	536	540
Total current liabilities	2,039	1,972

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.

	2017	2016
Operating leases and rents	245	227
Guarantee obligations on behalf of associates and third parties	113	117
Outstanding orders for projects under construction	12	31
Other	17	4
Total	387	379

Guarantee obligations are principally related to VAT and duties on the one hand and to financing obligations of associated companies on the other. Guarantee obligations will only lead to cash outflow when called upon. At year-end, no obligations had been called upon. Most of the outstanding orders for projects under construction will be completed in 2018. Property, plant and equipment under operating leases primarily concerns cars, catalysts, buildings and various equipment items.

The commitments for operating leases and rents are spread as follows:

Operating leases and rents		
	2017	2016 ¹
2017	-	46
2018	66	36
2019	42	29
2020	30	21
2021	20	16
2022	18	15
After 2022	69	64
Total	245	227

¹ 2016 figures have been restated for comparison reasons.

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 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 2017, 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. An important element of DSM's financial policy and capital management is the allocation of cash flow. DSM primarily allocates cash flow to investments aimed at strengthening its business positions and securing the dividend payment to its shareholders. Remaining cash flow is further used for acquisitions and partnerships that strengthen DSM's competences and market positions. This is discussed more extensively in Financial and Reporting Policies of the Report by the Managing Board, see page 98. The net debt to equity ratio (gearing) is disclosed as part of Note 25.

Liquidity risk

Liquidity risk is the financial risk due to uncertain development of liquidity. An entity 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 financial markets on which it depends are subject to loss of liquidity.

The primary objective of liquidity management is to optimize the corporate cash position, among other things, by securing

availability of sufficient liquidity for execution of payments by DSM entities, at the right time and the right place.

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 (2016: € 1,000 million). The agreements for the committed credit facilities have neither financial covenants nor material adverse changes clauses. At year-end 2017, no loans had been taken up under the committed credit facilities.

Furthermore, DSM has a commercial paper program amounting to € 1,500 million (2016: € 1,500 million). The company will use the commercial paper program to a total of not more than € 1,000 million (2016: € 1,000 million). At 31 December 2017, € 0 million had been issued as

commercial paper (2016: € 0 million). 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

	Fixed-rate borrowings	Floating- rate borrowings	Monetary liabilities	Guarantees	Subtotal	Interest payments	Cash at ¹ redemption	Total cash out
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
2017								
Within 1 year	8	-	2,108	-	2,116	35	2	2,153
Within 1 to 2 years	301	-	46	-	347	35	8	390
Within 2 to 3 years	-	-	25	-	25	29	10	64
Within 3 to 4 years	5	-	9	-	14	29	5	48
Within 4 to 5 years	499	-	4	-	503	29	5	537
After 5 years	1,746	-	49	113	1,908	61 ²	16	1,985
Total	2,559	-	2,241	113	4,913	218	46	5,177

¹ Difference between nominal redemption and amortized costs.

² Cumulative interest payments in remaining years.

The exposure of the financial derivatives to liquidity risk is as follows. The amounts are gross and undiscounted.

The table contains the cash flows from derivatives with positive fair values and from derivatives with negative fair values to have a complete overview of the financial derivatives related cash flows.

Financial derivatives cash flow

	2017	2018	2019	2020	2021	2022	Total
2016							
Inflow	2,143	42	58	42	12	-	2,297
Outflow	(2,337)	(43)	(66)	(45)	(12)	-	(2,503)
2017							
Inflow	-	2,655	63	42	38	21	2,819
Outflow	-	(2,675)	(72)	(45)	(41)	(21)	(2,854)

Interest rate risk

Interest rate risk is the risk that adverse movements of interest rates lead to high costs on interest-bearing debt or assets, 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.

At 31 December 2017, €0 million of debt carried a floating rate interest (2016: €36 million).

At 31 December 2017, DSM had no outstanding fixed-floating interest rate swaps (end of 2016 none).

The following analysis of the sensitivity of borrowings, assets 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 2017, with all other variables held constant. A 1% reduction in interest rates would result in a €18 million pre-tax loss in the income statement and equity on the basis of the composition of financial instruments on 31 December 2017, 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 financial instruments on 31 December 2017 to changes in interest rates is set out in the following table:

Sensitivity to change in interest rate

	2017			2016		
	Carrying amount	Sensitivity of financial income and expense to change in interest of:		Carrying amount	Sensitivity of financial income and expense to change in interest of:	
		+1%	(1%)		+1%	(1%)
Loans to associates and joint ventures	193	-	-	253	-	-
Current investments	954	10	(10)	944	9	(9)
Cash and cash equivalents	899	9	(9)	604	6	(6)
Short-term borrowings	(77)	(1)	1	(853)	(1)	1
Long-term borrowings	(2,551)	-	-	(2,552)	-	-

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 € 0 million (2016: € 865 million). At 31 December 2017, the notional amount of the currency forward contracts was € 3,525 million (2016: € 2,241 million).

In 2017, DSM hedged USD 570 million (2016: USD 580 million) of its projected net cash flow in USD in 2018, of which USD 189 million against EUR and USD 381 million against CHF by means of average-rate currency forward contracts at an average exchange rate of USD 1.15 per euro and CHF 0.96 per USD, respectively, for the four quarters of 2018. Each quarter the relevant hedges for that quarter will be settled and recognized in the income statement. In 2017, DSM also hedged JPY 5,550 million (2016: JPY 5,550 million) of its projected net cash flow in JPY in 2018, 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 114 per Swiss franc and JPY 125 per euro, respectively, for the four quarters of 2018. DSM also continued the hedge of projected GBP cash obligations against CHF, namely GBP 11 million at an average exchange rate of CHF 1.24 per British pound. These hedges have fixed the exchange rate for part of the USD and JPY receipts and GBP payments in 2018. Cash flow hedge accounting is applied for these hedges. As a result of similar hedges concluded in 2016 for the year 2017, € 10 million negative (2016: € 32 million negative) was recognized in the 2017 operating profit 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 partial hedging of the currency risk associated with the translation of DSM's CHF denominated investments was continued for an amount of € 204 million (2016: CHF 370 million). The partial hedging of the currency risk associated with the translation of DSM's net investment in Patheon (USD) started in March 2017 and was discontinued upon the sale of DSM's share in Patheon N.V. in August 2017. 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 to change in exchange rate

	2017			2016		
	Carrying amount	Sensitivity to change in all exchange rates of:		Carrying amount	Sensitivity to change in all exchange rates of:	
		+10%	(10%)		+10%	(10%)
Loans to associates and joint ventures	193	5	(5)	253	6	(6)
Current investments	954	1	(1)	944	34	(34)
Cash and cash equivalents	899	46	(46)	604	42	(42)
Short-term borrowings	(77)	(8)	8	(853)	(10)	10
Long-term borrowings	(2,551)	(1)	1	(2,552)	(1)	1
Interest rate swaps	-	-	-	-	-	-
Currency forward contracts	3	(18)	18	(139)	(128)	128
Currency forwards related to net investments in foreign entities	1	(17)	17	(47)	(36)	36
Average-rate forwards used for economic hedging ²	12	(13)	13	(27)	(17)	17
Commodity hedging	17	2	(2)	-	-	-

¹ Fair-value change reported in Translation reserve.

² Fair-value change reported in Hedging reserve.

Sensitivity changes on these positions will generally be recognized in profit or loss or in the translation reserve in equity, 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' on page 199. 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.

With the policies explained above the currency risks of DSM and the impact resulting from the sensitivity of changes in exchange rates as disclosed above, are covered, with only minimal residual exposures left. These are considered to be not material. With regard to the forecasted transactions, the hedging takes place in accordance with pre-approved percentages.

Price risk

Financial instruments that are subject to changes in stock exchange prices or indexes are subject to a price risk. At year-end 2017, 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 risks 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 management. 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 about impairments is in addition to the notes already presented in Note 2.

DSM's policy is to grant corporate guarantees for credit support of subsidiaries and associates, to get access to credit facilities which are necessary for their operating working capital needs and which cannot be funded by the corporate cash pools and/or for bank guarantees needed for local governmental requirements. 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 2017		31 December 2016	
	Carrying amount	Fair value	Carrying amount	Fair value
Assets				
Other participations	89	89	50	50
Loans to associates and joint ventures	193	215	253	258
Other non-current receivables	177	177	136	136
Current receivables	1,690	1,690	1,653	1,653
Financial derivatives	57	57	40	40
Current investments	954	954	944	944
Cash and cash equivalents	899	899	604	604
Liabilities				
Non-current borrowings	2,551	2,649	2,552	2,717
Drawing rights liabilities	64	64	68	68
Current borrowings	77	77	853	886
Financial derivatives	24	24	253	253
Other current liabilities	2,039	2,039	1,972	1,972

The following methods and assumptions were used to determine the fair value of financial instruments: cash, current investments, current receivables, current borrowings (excluding current portion of long-term instruments) and other current liabilities are stated at carrying amount, which approximates fair value in view of the short maturity of these instruments. The fair value 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 2016 and 2017.

The following table shows the carrying amounts of the financial instruments, broken down by type and purpose:

Carrying amounts financial instruments at fair value				
	Fair value hierarchy	Assets	Liabilities	Total
Bonds	Level 1	-	(2,663)	(2,663)
Other participating interests	Level 1	24	-	24
Currency swaps related to investments	Level 2	-	(47)	(47)
Currency swaps and forward contracts	Level 2	40	(206)	(166)
Earn-out receivables / payables	Level 3	108	(17)	91
Other participating interests	Level 3	26	-	26
Balance at 31 December 2016		198	(2,933)	(2,735)
Bonds	Level 1	-	(2,649)	(2,649)
Other participating interests	Level 1	47	-	47
Currency forward contracts related to investments	Level 2	1	-	1
Currency swaps and forward contracts	Level 2	39	(24)	15
Commodity derivatives	Level 2	17	-	17
Earn-out receivables / payables	Level 3	85	(39)	46
Other participating interests	Level 3	42	-	42
Balance at 31 December 2017		231	(2,712)	(2,481)

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		
	2017	2016
Defined benefit plans:		
Pension costs included in employee benefit costs:		
- Current service costs pension plans	28	35
- Other post-employment benefits	2	1
Defined contribution plans	82	95
Total pension costs included in employee benefits costs	112	131
- Pension costs included in Other operating income	(20) ¹	(16) ¹
Total in operating profit	92	115
Pension costs included in financial income and expense	8	10
Pension costs included in APM adjustments	-	1
Total	100	126
Of which:		
- Defined contribution plans	82	95
- Defined benefit plans	18	31

¹ Curtailment gains because of plan amendments in the UK, US and Switzerland.

For 2018, costs for the defined benefit plans relating to pensions are expected to be €33 million (2017: €30 million).

Changes in Employee benefits liabilities recognized in the balance sheet are shown in the following overview:

Employee benefits net liabilities

	2017	2016
Balance at 1 January	530	540
Changes:		
- Balance of actuarial (gains)/losses	(70)	8
- Employee benefits costs	18	32
- Contributions by employer	(70)	(49)
- Exchange differences	(14)	(1)
Total changes	(136)	(10)
Balance at 31 December	394	530

The Employee net benefits liabilities of €394 million (2016: €530 million) consist of €374 million related to pensions (2016: €509 million), €6 million related to healthcare and other costs (2016: €7 million) and €14 million related to other post-employment benefits (2016: €14 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; and
- 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 2017 was 1.0% (2016: 1.25%) for the mandatory portion (BVG/LPP). There is also a minimal conversion rate applicable. The weighted average duration of the defined benefit obligation is 12.9 years (2016: 13.0) which could be seen as an indication of the maturity profile of the 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. In 2017, the Trustees implemented a reduction of the conversion rate for the accounts related to the higher income (in the first quarter) and the accounts related to the lower income (in the fourth quarter). This has reduced the pension liabilities in Switzerland. 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 (estimated) funding level, based on local standards, is 119% (2016: 113%), which is above the legally required minimum funding level.

DSM UK Pension Scheme

The DSM UK Pension Scheme was closed as of 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. In 2017, the 2015 valuation was finalized resulting in the continuation of the annual recovery contribution (GBP 1 million) and the company guarantee of GBP 14 million. A strategic workgroup was established to redesign the long-term de-risking strategy for the DSM UK Pension Scheme with the objective to align the company's intentions and the Trustees responsibility with respect to this plan. The weighted average duration of the defined benefit obligation is 20.7 years (2016: 22.1) which could be seen as an indication of the maturity profile of the scheme. In 2017, the Trustees and DSM jointly decided to adjust the benefit indexation in the historic APC sections of the scheme. This decision has reduced the pension liability in the UK. The current funding level, based on local standards, is estimated at 103% (2016: 94%).

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. In 2017, DSM provided a one-time funding of USD 22 million into the scheme to reduce the deficit and avoid the payment of the variable part of PBGC (guarantee) contributions. 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. In 2017, the Trustees provided a lump sum window to terminated vested participants which has resulted in a reduction of pension liabilities.

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. 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 97% (2016: 87%), whereas the funding level on local standards (Pension Protection Act) is estimated at 129% (2016: 114%). 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 the local company. The weighted average duration of the defined benefit obligation is 15.6 years (2016: 15.6) which could be seen as an indication of the maturity profile of the scheme.

The most important unfunded plans are in Germany for which the associated liability amounts €297 million (2016: €312 million). In 2017, DSM agreed on a lump sum payment of €7 million to a group of pensioners to settle their pension liability.

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

	2017	2016
Balance at 1 January	1,806	1,745
Changes:		
- Service costs	28	35
- Interest costs	28	32
- Contributions	13	14
- Actuarial (gains)/losses	45	65
- Past service costs	(17)	-
- Curtailments/termination benefits	1	(15)
- Exchange differences	(129)	(11)
- Settlements	(25)	-
- Benefits paid	(75)	(59)
Balance at 31 December	1,675	1,806

Fair value of plan assets

	2017	2016
Balance at 1 January	1,298	1,224
Changes:		
- Interest income on plan assets	20	23
- Actuarial gains/(losses)	115	60
Actual return on plan assets	135	83
- Contributions by employer	49	33
- Contributions by employees	13	14
- Disbursement	(62)	(46)
- Exchange differences	(117)	(10)
- Settlements	(15)	-
Balance at 31 December	1,301	1,298

The fair value of the plan asset consists of 99% of quoted assets (2016: 99%).

The actuarial gains/losses as included in the previous tables can be specified as follows:

Remeasurement effects as included in Other comprehensive income

	2017	2016
Defined benefit obligation major pension plans		
Actuarial (gain)/loss due to experience	24	(15)
Actuarial (gain)/loss due to demographic assumption	(7)	(16)
Actuarial (gain)/loss due to financial assumption changes	28	96
	45	65
Plan assets major pension plans		
Change in irrecoverable surplus other than interest	(1)	(1)
Return on plan assets (greater)/less than discount rate	116	60
	115	59
Actuarial (gain)/loss major plans	(70)	6
Actuarial (gain)/loss other plans	(13)	2
Total actuarial (gain)/loss	(83)	8

The amounts recognized of these plans in the balance sheet are as follows:

	2017	2016
Net assets/liabilities		
Major plans:		
Present value of funded obligations	(1,370)	(1,484)
Fair value of plan assets	1,301	1,298
	(69)	(186)
Present value of unfunded obligations	(305)	(322)
Funded status	(374)	(508)
Effect of asset ceiling	-	(1)
Net liabilities/assets major plans	(374)	(509)
Net liabilities/assets other plans	(20)	(21)
Total net liabilities/assets	(394)	(530)
Of which:		
- Liabilities (Employee benefits liabilities)	(395)	(530)
- Assets (Prepaid pension costs)	1	-

In 2018, DSM is expected to contribute €26 million (actual 2017: €49 million) to its major defined benefit plans.

The major categories of pension-plan assets as a percentage of total plan assets are as follows:

	2017	2016
Pension-plan assets by category		
Bonds	43%	53%
Equities	35%	32%
Property	18%	12%
Other	4%	3%

The pension-plan assets include neither ordinary DSM shares nor property occupied by DSM.

The main actuarial assumptions for the year (weighted averages) are:

	2017	2016
Actuarial assumptions for major plans outside the Netherlands		
Discount rate	1.49%	1.63%
Price inflation	1.71%	1.57%
Salary increase	2.29%	2.08%
Pension increase	0.87-2.10%	0.88-2.15%

Year-end amounts for the current and previous periods are as follows:

	2017	2016	2015	2014	2013
Major defined benefit plans per year					
Defined benefit obligations	(1,675)	(1,806)	(1,745)	(1,564)	(1,316)
Plan assets	1,301	1,297	1,224	1,086	958
Funded status of asset/(liability)	(374)	(509)	(521)	(478)	(358)
Experience adjustments on plan assets, gain/(loss)	115	60	(22)	61	7
Experience adjustments on plan liabilities, gain/(loss)	(24)	15	(39)	(1)	16
Gain/(loss) on liabilities due to changes in assumptions	(21)	(80)	(4)	(222)	(25)

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% (2016: 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 0.3% (2016: 0.4%) in the defined benefit obligation; and
- A 0.25% increase/decrease in the expected rate of pension increase would lead to an increase/decrease of less than 1.1% (2016:1.0%) 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 dependents 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 2016	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)
Change from operating activities	996	(20)	(2)	-	-	45	1,019
Change from investing activities	689	30	(4)	(20)	-	21	716
Reclassification from non-current to current	-	-	12	(12)	-	-	-
Transfers	(794)	-	(6)	810	(10)	-	-
Dividend	(200)	-	-	-	-	-	(200)
Interest	(135)	-	-	-	-	-	(135)
Proceeds from reissued shares	107	-	-	-	-	-	107
Repurchase of shares	(297)	-	-	-	-	-	(297)
Derivatives	(28)	-	-	-	-	180	152
Other	3	-	-	-	-	-	3
Change from financing activities	(1,344)	-	6	798	(10)	180	(370)
Exchange differences	(46)	-	1	-	8	-	(37)
Total changes	295	10	1	778	(2)	246	1,328
Balance at 31 December 2017	899	954	(2,551)	(8)	(69)	33	(742)

In 2017, the gearing (net debt / equity plus net debt) is 9.5% (in 2016: 25.1%).

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 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		
	2017	2016
Operating working capital		
Balance at 1 January	1,928	1,808
Balance at 31 December	1,938	1,928
Balance sheet change	10	120
Adjustments:		
- Exchange differences	200	(78)
- Changes in consolidation (including acquisitions and disposals)	(10)	(4)
- Reclassification from/to held for sale	-	(3)
- Transfers/non-cash value adjustments	(5)	23
Total change in operating working capital according to the cash flow statement	195	58

In 2017, the operating working capital before reclassification to held for sale was € 1,938 million (2016: € 1,928 million), which amounts to 22.3% of annualized fourth quarter net sales (2016: 23.9%). The increase in operating working capital as a result of 9% organic growth was largely compensated by the weakening of mainly the USD and CHF.

27 Share-based compensation

Under the DSM Stock Incentive Plan, management share units (performance-related and non-performance-related) and (until 2016) stock options (performance-based and non-performance-based) or Share Appreciation Rights (SARs; until 2011) are, respectively have been granted to senior management. The grant date is the first day on which the DSM stock is quoted ex-dividend following the Annual General Meeting of Shareholders.

Since 2011, SARs are no longer used as share-based compensation. As of 2017, the stock options for senior management have been replaced by management share units. These share units vest after three years partially based upon the realization of predefined performance measures.

Stock options and SARs have a term of eight years and are subject to a vesting period of three years. Management share units have a term of three years. After this three-year period, one third of the management share units, stock options and SARs (non-performance-related) will vest and two thirds of the management share units, stock options and SARs that are related to performance will vest in whole, in part, or not at all. Options become exercisable upon vesting. The performance measurement of the 2017 series of the management share units 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) reduction. Stock options related to performance as granted in 2016 are subject to the same performance criteria (while vesting of performance-related stock options as granted in 2015 is subject to TSR only). Non-vested management share units, 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, LTI performance shares have been granted since 2010 (no longer stock options) and for other Executive Committee members since 2016. LTI performance shares vest after three years upon the realization of predefined performance measures.

For the LTI performance shares of the Managing Board please refer to Note 13 'Remuneration of Managing Board and Supervisory Board' to the Financial statements of the parent company.

All management share units, 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. 2016	In 2017				Outstanding at 31 Dec. 2017	Fair value on grant date (€)	Exercise price (€)	Expiry date
		Granted	Exercised	Average price (€)	Forfeited/ expired				
2009	43,400	-	(43,400)	61.03	-	-	2.83	21.10	27 Mar. 2017
2010	224,500	-	(163,750)	67.85	-	60,750	6.07	33.10	6 Apr. 2018
2011	411,926	-	(214,563)	67.78	(2,500)	194,863	9.60	46.20	2 May 2019
2012	368,000	-	(166,100)	66.75	(3,750)	198,150	6.88	40.90	15 May 2020
2013	615,588	-	(242,438)	67.65	(6,250)	366,900	9.23	48.91	7 May 2021
2014 ^{1,2}	2,200,988	-	(756,853)	69.63	(728,012) ³	716,123	10.66	52.00	9 May 2022
2015 ¹	2,578,875	-	(152,050)	68.38	(197,525) ³	2,229,300	9.89	50.98	5 May 2023
2016 ¹	2,744,475	-	(52,800)	68.30	(246,525) ³	2,445,150	9.36	52.57	3 May 2024
2017 Total	9,187,752	-	(1,791,954)	68.36	(1,184,562)	6,211,236			
Of which vested	1,983,364					1,711,536			
	at 31 Dec. 2015					at 31 Dec. 2016			
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			

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 2014 vested only partially; the remaining part has been forfeited.

³ Number of forfeited options: 728,012 (2014), 197,525 (2015), and 246,525 (2016).

Overview of management share units

Year of issue	Outstanding at 31 Dec. 2016	In 2017			Outstanding at 31 Dec. 2017	Share price at date of grant (€)	Expiry date
		Granted	Vested	Forfeited/ expired			
2017	-	449,312	(4,206)	(4,963)	440,143	67.33	5 May 2020
2017 Total	-	449,312	(4,206)	(4,963)	440,143		
	at 31 Dec. 2015				at 31 Dec. 2016		
2016 Total	-	-	-	-	-		

Additionally, DSM grants certain members of senior management 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. Under this plan a total of 130,778 shares were granted of which at the end of 2017 84,683 shares vested and 15,344 were forfeited. The fair value of these shares is determined based on the average quoted market price in the first quarter of 2016.

Furthermore, 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. 2016	In 2017				Outstanding at 31 Dec. 2017	Fair value on grant date (€)	Exercise price (€)	Exercise period until
		Granted	Exercised	Average price (€)	Forfeited/ expired				
2012	58,045	-	(46,615)	64.17	(11,430)	-	6.79	40.90	May 2017
2013	68,770	-	(37,535)	68.04	(1,600)	29,635	6.51	48.91	May 2018
2014	116,550	-	(51,100)	67.59	(8,375)	57,075	5.68	52.00	May 2019
2015	50,250	-	(21,660)	67.59	(2,305)	26,285	4.50	50.98	May 2020
2016	257,615	-	(113,290)	67.50	(5,595)	138,730	4.38	52.57	May 2021
2017	-	433,505	(111,700)	76.52	(19,900)	301,905	6.14	67.33	May 2022
2017 Total	551,230	433,505	(381,900)	69.80	(49,205)	553,630			
2016 Total	883,155	561,135	(851,940)	57.75	(41,120)	551,230			

Measurement of fair value

The costs of LTI performance shares and management share units are measured by reference to the fair value of the DSM share at the date on which the performance shares and share units are granted, ex dividend as the performance shares and share units do not accumulate dividend during the three-year vesting period.

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).

Plan assumptions

The following assumptions were used to determine the fair value at grant date:

	2017	2016
Plan assumptions		
Management share units (2017) and options (2016)		
Risk-free rate	(0.56%)	(0.23%)
Expected share unit / option life in years	3	6
Nominal share unit / option life in years	3	8
Share price	67.33	52.57
Exercise price	-	52.57
Volatility	-	29.5%
Expected dividend (2017 in € ; 2016 in %)	5.25	3.14%
Fair value of share unit / option granted	62.08	9.36
Employee options		
Risk-free rate	(0.56%)	(0.48%)
Expected option life in years	2.5	2.5
Nominal option life in years	5	5
Share price	67.33	52.57
Exercise price	67.33	52.57
Volatility	20.5%	20.0%
Expected dividend	2.60%	3.14%
Fair value of option granted	6.14	4.38

An amount of €23 million is included in the costs for wages and salaries for share-based compensation (2016: €24 million). The following table specifies the share-based compensation:

	2017	2016
Share-based compensation		
Stock options and management shares	19	18
Share appreciation rights	-	1
Performance shares	4	5
Total expense	23	24

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 from/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.

	Joint ventures		Associates	
	2017	2016	2017	2016
Transactions with related parties				
Continuing operations				
Sales to	22	27	24	43
Purchases from	6	8	381	338
Loans to	12	62	181	191
Receivables from	26	41	122	144
Payables to	24	62	141	163
Interest from	4	4	14	13

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 €64 million (2016: €75 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. For further details about the remuneration of the Managing Board, the Executive Committee and the Supervisory Board, please refer to Note 13 to the 'Parent company financial statements'.

29 Service fees paid to external auditors

The service fees recognized in the financial statements 2017 for the service of KPMG amounted to €4.9 million (2016: €4.8 million). The amounts per service category are shown in the following table.

	Total service fee		Of which	
	KPMG 2017	KPMG 2016	KPMG NL 2017	KPMG NL 2016
Audit of the group financial statements	4.4	4.1	2.8	2.6
Audit of other (statutory) financial statements	0.4 ¹	0.6	-	-
Other assurance services	0.1	0.1	0.1	0.1
Total assurance services	4.9	4.8	2.9	2.7

¹ Statutory audits previously carried out by another auditor.

30 Events after the balance sheet date

In 2018, DSM will re-evaluate its control assumption over Yantai Andre Pectin, which could result in deconsolidation of the entity. The re-evaluation is triggered by the recent developments after the refusal of the other shareholders to transfer their shares to DSM despite an earlier agreement. In 2017, the consolidated sales were €47 million and Adjusted EBITDA was €17 million.

Parent company financial statements

Balance sheet at 31 December of Koninklijke DSM N.V. before profit appropriation

x € million	Notes	2017	2016
Assets			
<i>Non-current assets</i>			
Intangible assets	2	433	447
Property, plant and equipment	3	12	15
Financial assets	4	9,640	9,975
Deferred tax assets	5	131	173
		10,216	10,610
<i>Current assets</i>			
Receivables	6	79	98
Financial derivatives		1	-
Cash and cash equivalents		2	-
		82	98
Total		10,298	10,708
Shareholders' equity and liabilities			
<i>Shareholders' equity</i>			
	7		
Share capital		338	338
Share premium		489	489
Treasury shares		(398)	(339)
Other reserves		(622)	(95)
Retained earnings		5,386	5,058
Profit for the year		1,769	621
		6,962	6,072
<i>Non-current liabilities</i>			
Borrowings	8	2,542	2,541
		2,542	2,541
<i>Current liabilities</i>			
Borrowings	8	-	749
Financial derivatives		-	47
Other current liabilities	9	794	1,299
		794	2,095
Total		10,298	10,708

Income statement of Koninklijke DSM N.V.

x € million	Notes	2017	2016
Other income	1	173	205
Cost of outsourced work and other external costs		(84)	(95)
Wages and salaries	11	(72)	(78)
Social security and pension charges		(8)	(12)
Amortization of intangible assets and depreciation of Property, plant and equipment		(12)	(8)
Total operating expenses		(176)	(193)
Operating profit		(3)	12
Financial income	12	15	16
Financial expense	12	(105)	(112)
Result before income tax		(93)	(84)
Income tax	5	18	17
Share of the profit of subsidiaries	4	590	465
Result after income tax		515	398
Share of the profit of associates and joint ventures	4	18	(9)
Other results related to associates and joint ventures	4	1,236	232
Net profit attributable to equity holders of Koninklijke DSM N.V.		1,769	621

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, as well as on 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 (€8 million) and Pentapharm in 2007 (€33 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
<i>Balance at 1 January 2016</i>				
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)
<i>Balance at 31 December 2016</i>				
Cost	403	4	78	485
Amortization and impairment losses	-	-	38	38
Carrying amount	403	4	40	447
Change in carrying amount				
- Capital expenditure	-	1	-	1
- Put into operation	-	(4)	4	-
- Exchange difference	(4)	-	-	(4)
- Amortization	-	-	(8)	(8)
- Impairment losses	-	-	(3)	(3)
	(4)	(3)	(7)	(14)
<i>Balance at 31 December 2017</i>				
Cost	399	1	83	483
Amortization and impairment losses	-	-	50	50
Carrying amount	399	1	33	433

3 Property, plant and equipment

This item mainly relates to land and buildings. Capital expenditure in 2017 was €2 million (2016: €0 million), while the depreciation charge in 2017 was €1 million (2016: €1 million). The historical cost of Property, plant and equipment at 31 December 2017 was €61 million (2016: €62 million); accumulated depreciation amounted to €49 million (2016: €47 million).

4 Financial assets

	Subsidiaries		Associates and JVs		Receivables	Total
	Share in equity	Loans	Share in equity	Loans		
Balance at 1 January 2016	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
- Disposals	-	-	128	-	-	128
- Transfers	-	-	-	-	31	31
- Others	(14)	-	(28)	(3)	(16)	(61)
Balance at 31 December 2016	9,433	-	432	-	110	9,975
Changes:						
- Share in profit	590	-	18	-	-	608
- Charged to income statement	-	-	-	-	30	30
- Dividend received	(80)	-	-	-	-	(80)
- Capital payments	11	-	-	-	-	11
- Repayments	-	-	-	-	(43)	(43)
- Net actuarial gains/(losses)	61	-	-	-	-	61
- Change in Fair value reserve	(3)	-	-	-	-	(3)
- Change in Hedging reserve	35	-	5	-	-	40
- Exchange differences	(591)	-	(47)	-	(6)	(644)
- Disposals	-	-	(249)	-	-	(249)
- Transfers	(47)	-	-	-	-	(47)
- Impairments	-	-	(20)	-	-	(20)
- Other	-	-	1	-	-	1
Balance at 31 December 2017	9,409	-	140	-	91	9,640

For movements in Associates and joint ventures see Note 10 to the 'Consolidated financial statements'.

In 2016, transfers within Receivables include the earn-out of Patheon of €28 million and the divestment settlements of -€16 million.

Disposals in 2017 relate to the divestment of DSM's share in Patheon, including the settlement of the earn-out receivable. See Note 10 to the 'Consolidated financial statements'.

5 Deferred tax assets

This item mainly relates to net operating losses in the Dutch fiscal unity. In 2017, a tax income of €18 million (2016: €17 million) was included and other movements (mainly settlements with group companies) of -€60 million (2016: -€39 million).

6 Receivables

	2017	2016
Receivable from subsidiaries	52	83
Other receivables / deferred items	27	15
Total	79	98

7 Shareholders' equity

	2017	2016
Balance at 1 January	6,072	5,541
Net profit	1,769	621
Exchange differences, net of income tax	(637)	197
Net actuarial gains/(losses) on defined benefit obligations	74	(9)
Dividend	(320)	(296)
Repurchase of shares	(297)	(273)
Proceeds from reissue of ordinary shares	233	253
Other changes	68	38
Balance at 31 December	6,962	6,072

For details see the consolidated statement of changes in equity (Note 16) on page 161.

Legal reserve

In Shareholders' equity, an amount of -€ 107 million (2016: € 530 million) is included for Translation reserve, -€ 148 million (2016: -€ 207 million) for Hedging reserve, € 5 million (2016: € 8 million) for Fair value reserve and -€ 182 million (2016: -€ 100 million) for intangible assets related to product development projects. In addition, a legal reserve of € 126 million (2016: € 120 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 2017, the net profit is € 1,769 million (2016: € 621 million) and the amount to be appropriated to the reserves has been established at € 1,438 million (2016: € 311 million). From the subsequent balance of the net profit of € 331 million (2016: €

310 million), dividend is first distributed on the cumulative preference shares B. At the end of 2017 no cumprefs B were in issue (2016: no cumprefs B). Subsequently, a 3.26% (2016: 1.759%) dividend is distributed on the cumulative preference shares A, based on a share price of € 5.29 (2016: € 5.29) per cumulative preference share A. For 2017, this distribution amounts to € 0.17 (2016: € 0.09) per share, which is € 8 million in total. An interim dividend of € 0.06 per cumulative preference share A having been paid in August 2017, the final dividend will then amount to € 0.11 per cumulative preference share A.

The profit remaining after distribution of these dividends on the cumulative preference shares A of € 1,761 million (2016: € 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 2017 of € 1.85 (2016: € 1.75) per share. With an interim dividend of € 0.58 (2016: € 0.55) per ordinary share having been paid in August 2017, the final dividend would then amount to € 1.27 (2016: € 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:

Profit appropriation

	2017	2016
Net profit	1,769	621
Profit appropriation:		
- To be added to the reserves	1,438	311
- Dividend on cumprefs A	8	4
- Interim dividend on ordinary shares	101	96
- Final dividend distributable on ordinary shares	222	210

8 Borrowings

	2017		2016	
	Total	Of which current	Total	Of which current
Debenture loans	2,542	-	3,290	749
Commercial paper	-	-	-	-
Total	2,542	-	3,290	749

At 31 December 2017, there were four debenture loans (€2,542 million, maturing in 2019, and 2022 through 2026).

The repayment schedule for borrowings (excluding commercial paper) is as follows:

Borrowings by maturity		
	2017	2016
2017	-	749
2018	-	-
2019	300	300
2020 and 2021	-	-
2022 through 2026	2,242	2,241
Total	2,542	3,290

In agreements governing loans with a residual amount at year-end 2017 of €2,542 million, of which zero is of a current nature (31 December 2016: €3,290 million, of which €749 million was of a current nature), clauses have been included which restrict the provision of security. More information on borrowings is provided in Note 19 to the 'Consolidated financial statements', 'Borrowings'.

9 Other current liabilities

	2017	2016
Liabilities to subsidiaries	729	1,203
Other liabilities	65	91
Deferred items	-	5
Total	794	1,299

10 Contingent liabilities

Guarantee obligations on behalf of affiliated companies and third parties amounted to €379 million (31 December 2016: €380 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.

11 Personnel

The average number of employees working for Koninklijke DSM N.V. in 2017 was 372 (2016: 376), all of whom are based in the Netherlands.

12 Financial income and expense

Financial income of €15 million (2016: €16 million) mainly consists of interest income relating to a net investment hedge. Financial expense of €105 million (2016: €112 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'.

13 Remuneration of Managing Board and Supervisory Board

Remuneration Managing Board in 2017

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 2017

Adjustment of the base salary is at the discretion of the Supervisory Board. On 14 May 2017, it was decided to adjust the annual base salary of the CEO by 2.2% and for the other Managing Board members by 2.5% as of 1 July 2017.

Fixed annual salary

in €	1 July 2017	1 July 2016
Feike Sijbesma	920,000	900,000
Geraldine Matchett	605,000	590,000
Stephan Tanda ¹	-	590,000
Dimitri de Vreeze	605,000	590,000

¹ Left DSM to pursue his career outside of the company as of 1 February 2017.

Short-Term Incentives (STI) for 2017

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 2017 Integrated Annual Report presents the Short-Term Incentives that have been earned on the basis of results achieved in 2017. These Short-Term Incentives will be paid out in 2018.

The Supervisory Board has established the extent to which the targets for 2017 were achieved and has used their discretionary power to adjust achievements resulting in partially higher pay-out, including impact on ROCE. Regarding the financial targets, the score on the EBITDA target was overachieved, while the score on gross free cash flow was on target. The score for net sales growth was at maximum achievement. For the sustainability targets, the score on Brighter Living Solutions was on target, and the score on the Employee Engagement Index was overachieved. The Safety

Performance score was below threshold. Managing Board members also have individual targets. The scores achieved on these targets were at maximum achievement. The realization of the 2017 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 realization percentage was 75% of base salary. The realization percentage in 2017 was 75% of base salary versus 73.5-82.5% on average over 2016.

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 €	2017 ¹	2016 ²
Feike Sijbesma	682,500	742,500
Geraldine Matchett	448,125	457,250
Stephan Tanda ³	-	433,650
Dimitri de Vreeze	448,125	457,250

¹ Based on results achieved in 2017 and therefore payable in 2018.

² Based on results achieved in 2016 and therefore paid in 2017.

³ Left DSM to pursue his career outside of the company as of 1 February 2017.

All members of the Managing Board decided to invest the maximum of 50% of their gross 2016 STI (payable in 2017) 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 (RSUs). This was also the case with regard to the gross 2017 STI (which will be paid in 2018).

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 granted¹

	2017	2016
Feike Sijbesma	23,500	31,000
Geraldine Matchett	15,500	20,500
Stephan Tanda ²	-	20,500
Dimitri de Vreeze	15,500	20,500

¹ Grant according to Koninklijke DSM N.V. Performance Share Plan.

² Left DSM to pursue his career outside of the company as of 1 February 2017.

For 2018, the number of conditionally granted ordinary shares under the LTI program will be:

- Chairman 17,000
- Members 11,000

For an overview of all granted and vested stock options and performance shares, see page 225.

In 2017, the Supervisory Board established which proportion of the shares conditionally granted in 2014, vested. The following four performance measures are applicable to the 2014 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 2014 were published in DSM's 2014 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, while the performance in terms of GHGE reduction led to full vesting on this measure. Overall this resulted in the vesting of 50% of the total amount of shares granted in 2014.

Pensions in 2017

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. 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 offers two non-qualifying individual defined contribution plans to employees whose pensionable salary exceeds € 103,317 (2017 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 2017) € 103,317 per annum considering a deductible of € 13,592 (in 2017 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 € 103,317

- Employees whose pensionable salary exceeds € 103,317 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 2016, no revision or claw-back of bonuses occurred in 2017.

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 125 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 in 2017 are the Managing Board members Feike Sijbesma (CEO/Chairman), Geraldine Matchett (CFO) 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 Vrijnsen (People & Organization), who was succeeded by Judith Wiese on 1 January 2018. 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 € 5.5 million (2016: € 10.0 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 € 5.5 million in 2017 (2016: € 5.7 million).

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 expense for the Managing Board and the Executive Committee

(the reported costs for DSM, according to IFRS definitions, are not in all cases the compensation paid, nor the cash outflows for DSM)

x € thousand	Salary		Short-term incentive		Pension ¹ expenditure		Share-based ² compensation		Other items ³		Total	
	2017	2016	2017	2016	2017 ⁴	2016 ⁵	2017	2016	2017	2016	2017	2016 ⁵
Feike Sijbesma	910	900	683	743	214	206	850	811	50	50	2,707	2,710
Geraldine Matchett	598	590	448	457	101	87	634	445	74	77	1,855	1,656
Stephan Tanda ⁶	49	590	-	434	9	116	(895)	531	1	111	(836)	1,782
Dimitri de Vreeze	598	590	448	457	112	100	552	496	39	40	1,749	1,683
Total Managing Board	2,155	2,670	1,579	2,091	436	509	1,141	2,283	164	278	5,475	7,831
Other members of the Executive Committee	1,995	1,950	1,497	1,489	432	408	1,271	1,255	298	615	5,493	5,717
Total Executive Committee	4,150	4,620	3,076	3,580	868	917	2,412	3,538	462	893	10,968	13,548

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 percentage of vesting of shares and options will determine the final income for the Managing Board and Executive Committee members.

³ Other items include company car and allowances.

⁴ The pension expenditure contains an age-dependent contribution for the salary exceeding € 103,317. For employees with a higher age, a higher contribution level is applicable.

⁵ In 2016, this amount included a one-time additional pension contribution of € 2.2 million, bringing the total 2016 pension expenditure to € 2,709 thousand and the total remuneration of the CEO to € 4,910 thousand. For the entire Managing Board the total remuneration for 2016 was € 10,031 thousand.

⁶ Left DSM to pursue his career outside of the company as of 1 February 2017. The cumulative expense of the share-based compensation previously recognized for not yet vested performance shares has been reversed in 2017.

Pay ratio

Under the new Dutch Corporate Governance Code companies are required to publish a pay ratio. As the code does not provide a definition of the pay ratio, the calculation method applied will vary per company, which will make the pay ratio data incomparable. The pay ratio per company will also differ year on year, since the variable pay (as a percentage of annual base salary) of the CEO/Managing Board is typically much higher (100% at target) than the variable pay of the comparable average employee group (about 5-10% of annual base pay), and this variable pay will fluctuate with business results. On top of that, different regions of the world have different pay structures, so acquisitions/divestments will equally influence the pay ratio. DSM complies with the governance code in providing a pay ratio, using the following calculation method, as measured per 31 December 2017¹.

¹ Underlying data can be retrieved from table 'DSM's remuneration expense for the Managing Board and the Executive Committee' (see above) as well as Note 4 table 'Geographical information' under 'Workforce at year-end' on page 174 and Note 5 table 'Employee benefits costs' on page 175 of the 'Consolidated financial statements'. Data for the Netherlands are explicitly mentioned as they are not directly retrievable.

The ratio of total remuneration of the CEO, including annual base salary, short-term incentives, long-term incentives and other benefits such as pension (as reported in this annual report) versus the average of total global employee (i.e. including Dutch) remuneration (after deduction of total remuneration of the CEO) is 32:1.

Furthermore, the pay ratio of the full Managing Board total remuneration average versus the average of total global employee remuneration (after deduction of total remuneration of the Managing Board) is 25:1. In case the ratio is calculated versus the Dutch employee remuneration average, the ratios will be 20:1 (compared to CEO remuneration) or 16:1 (compared to average Managing Board remuneration). This is based on total NL cost of EUR 522 million (which includes the remuneration of the Managing Board and has been deducted in the ratio calculation) and a head count in the Netherlands of 3,831 as per 31 December 2017.

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. 2016	In 2017			Outstanding ¹ at 31 Dec. 2017	Average share price at exercise (€)	Expiry date
			Granted	Exercised	Forfeited/ expired			
Dimitri de Vreeze	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 May 2020
	2013	12,000	-	-	-	12,000	48.91	7 May 2021
	Total	60,000	-	-	-	60,000		
	Of which vested	60,000				60,000		

¹ The other members of the Managing Board do 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. 2016	In 2017			Outstanding at 31 Dec. 2017	Share price at date of grant (€)
			Granted	Vested	Forfeited / expired		
Feike Sijbesma	2014	28,822	-	(14,411)	(14,411)	-	49.88
	2015	32,051	-	-	-	32,051	52.58
	2016	36,350	-	-	-	36,350	48.79
	2017	-	29,333	-	-	29,333	63.65
	Total	97,223	29,333	(14,411)	(14,411)	97,734	
Retained shares originated from performance shares						81,035	
Geraldine Matchett	2015	27,008	-	-	-	27,008	52.58
	2016	24,006	-	-	-	24,006	48.79
	2017	-	19,092	-	-	19,092	63.65
	Total	51,014	19,092	-	-	70,106	
Retained shares originated from performance shares						-	
Stephan Tanda	2014	18,990	-	-	(18,990)	-	49.88
	2015	20,511	-	-	(20,511)	-	52.58
	2016	24,064	-	-	(24,064)	-	48.79
	Total	63,565	-	-	(63,565)	-	
Retained shares originated from performance shares						n.a.	
Dimitri de Vreeze	2014	16,910	-	(8,455)	(8,455)	-	49.88
	2015	20,836	-	-	-	20,836	52.58
	2016	24,005	-	-	-	24,005	48.79
	2017	-	19,092	-	-	19,092	63.65
	Total	61,751	19,092	(8,455)	(8,455)	63,933	
Retained shares originated from performance shares						4,431	
Other members Executive committee	2016	53,616	-	-	-	53,616	48.79
	2017	-	45,577	-	-	45,577	63.65
	Total	53,616	45,577	-	-	99,193	
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 2017, the members of the Managing Board together held 174,734 (2016: 198,290) 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 2017			31 December 2016		
	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	64,209	81,035	145,244	58,376	66,624	125,000
Geraldine Matchett	7,976	-	7,976	4,384	-	4,384
Stephan Tanda	-	-	-	18,065	37,350	55,415
Dimitri de Vreeze	17,083	4,431	21,514	13,491	-	13,491
Total holdings	89,268	85,466	174,734	94,316	103,974	198,290

Loans

The company does not provide any loans to members of the Managing Board.

Supervisory Board remuneration in 2017

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 of € 4,000 (2016: € 4,000).

The fixed fee per appointed year for the Chair of the Supervisory Board is € 85,000 (2016: € 85,000). The other members of the Supervisory Board each receive a fixed fee of € 60,000 (2016: € 60,000). Audit Committee membership is awarded € 10,000 (2016: € 10,000) per member and € 15,000 (2016: € 15,000) for the Chair. Nomination Committee, Remuneration Committee and Sustainability Committee membership is awarded € 7,000 (2016: € 7,000) per member and € 10,000 (2016: € 10,000) for the Chair.

Overview of remuneration awarded to the Supervisory Board in 2017

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 € 0.7 million (2016: € 0.6 million).

The remuneration of the individual members of the Supervisory Board was as follows:

Remuneration Supervisory Board members

in €	Annual fixed fee	Committee fee	Other costs	Total	
				2017	2016
Rob Routs, Chairman	85,000	17,000	5,250	107,250	96,750
Tom de Swaan, Deputy Chairman (as of 29 April 2016)	60,000	22,000	5,250	87,250	79,604
Victoria Haynes	60,000	17,000	17,250	94,250	87,584
Pierre Hochuli (until 3 May 2017)	20,000	5,667	313	25,980	74,250
Eileen Kennedy	60,000	17,000	17,250	94,250	93,917
Ewald Kist, Deputy Chairman (until 29 April 2016)	-	-	-	-	21,740
Pauline van der Meer Mohr	60,000	17,000	5,250	82,250	74,604
Frits van Paasschen (as of 3 May 2017)	40,000	11,333	16,937	68,270	-
Pradeep Pant (as of 29 April 2016)	60,000	17,000	25,250	102,250	72,271
John Ramsay (as of 3 May 2017)	40,000	6,667	4,938	51,605	-
Total	485,000	130,667	97,688	713,355	600,720
Total 2016	420,002	111,000	69,718	600,720	

Committee Overview

	Nomination	Remuneration	Auditing	Sustainability
Rob Routs, Chairman	Chairman	Member	-	-
Tom de Swaan, Deputy Chairman	-	Member	Chairman	-
Victoria Haynes	-	Member	Member	-
Pierre Hochuli (until 3 May 2017)	-	-	Member	Member
Eileen Kennedy	Member	-	-	Chairman
Pauline van der Meer Mohr	Member	Chairman	-	-
Frits van Paasschen (as of 3 May 2017)	-	-	Member	Member
Pradeep Pant (as of 29 April 2016)	-	-	Member	Member
John Ramsay (as of 3 May 2017)	-	-	Member	-

At year-end 2017, two members of the Supervisory Board held shares in Koninklijke DSM N.V.: Victoria Haynes 300 (2016: 300) and Pauline van der Meer Mohr 1,029 (2016: 1,029).

Loans

The company does not provide any loans to members of the Supervisory Board.

Heerlen, 27 February 2018

Managing Board,

Feike Sijbesma, CEO/Chairman
Geraldine Matchett, CFO
Dimitri de Vreeze

Heerlen, 27 February 2018

Supervisory Board,

Rob Routs, Chairman
Tom de Swaan, Deputy Chairman
Victoria Haynes
Eileen Kennedy
Pauline van der Meer Mohr
Frits van Paasschen
Pradeep Pant
John Ramsay

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 audit of the financial statements 2017 included in the Integrated Annual Report

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 2017 and of its result and its cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch 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 2017 and of its result for the year then ended, in accordance with Part 9 of Book 2 of the Dutch Civil Code.

What we have audited

We have audited the financial statements 2017 of Royal DSM based in Heerlen. 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 2017;
- the following consolidated statements for 2017: 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 2017;
- the parent company income statement for 2017; 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 EU Regulation on specific requirements regarding statutory audits

of public-interest entities, the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), 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 the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Audit approach

Summary

Materiality

- Materiality of € 30 million
- 3.5% of adjusted profit before tax from continuing operations

Group audit

- Audit at (business) group and local entity level resulting in a coverage of 73% of net sales from continuing operations and 80% of total assets

Key audit matters

- Valuation of goodwill
- Impairment on POET-DSM joint venture
- Divestment of Patheon

Unqualified opinion

Materiality

Based on our professional judgment we determined the materiality for the financial statements as a whole at €30 million (2016: €30 million). The materiality is determined with reference to adjusted profit before tax from continuing operations (Note 2: €853 million; 2016: €609 million) of which it represents 3.5% (2016: 4.9%). In addition, the appropriateness of the materiality was assessed by comparing the amount to consolidated net sales from continuing operations of which it represents 0.3% (2016: 0.4%). 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 (2016: €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

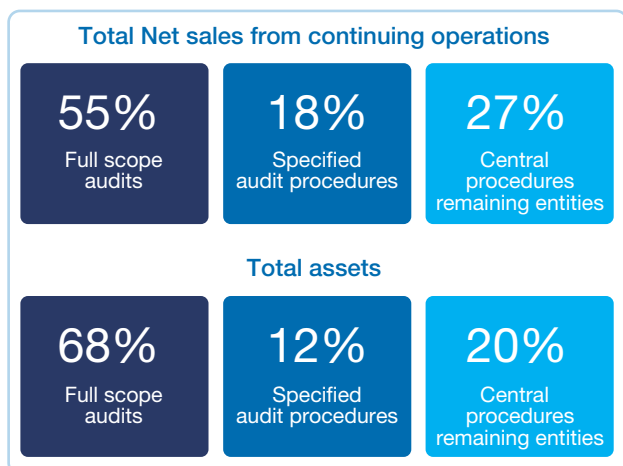
Royal DSM is head of a group of reporting entities (hereafter: entities). The financial information of this group is included in the consolidated financial statements of Royal DSM.

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 25 entities (2016: 27 entities) to perform audits for group reporting purposes on a complete set of financial information as well as 17 entities (2016: 14 entities) to perform specified audit procedures for group reporting purposes on specific items of financial information.

This resulted in a coverage of 73% (2016: 74%) of total net sales from continuing operations and 80% (2016: 81%) of total assets. The remaining 27% of total net sales from continuing operations (2016: 26%) and 20% of total assets (2016: 19%) 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 2% 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.

Our procedures as described above can be summarized as follows:



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, disposals, 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
- used the work of local non-KPMG auditors when auditing Royal DSM's investments such as DSM Sinochem Pharmaceuticals, Ltd and ChemicalInvest Holding B.V.

The group audit team has set materiality levels for the entities, which ranged from €5 million to €12.5 million (2016: €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, China, Singapore and the shared service center in India.

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, including Royal DSM's investment in Patheon N.V., 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 judgement, 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 divestment of Royal DSM's investment in Patheon N.V. as the accounting for this transaction is significant for the financial statements. Last year's key audit matters about the valuation of deferred tax assets and the Alternative performance measures are not included anymore in 2017 given the decreased risk profile of valuation of deferred tax assets and the lower prominence given to Alternative performance measures in the financial statements.

Valuation of goodwill

Description

Royal DSM carries a significant amount of goodwill in the balance sheet. Under EU-IFRS, the company is required to test the amount of goodwill for impairment at least annually. 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 disclosure (Note 8) to the financial statements.

Our observation

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 as being proportionate.

Impairment on joint venture POET-DSM Advanced Biofuels LLC

Description

Royal DSM has a 50% investment in POET-DSM Advanced Biofuels which is classified as joint venture in accordance with IFRS 11 and accounted for using the equity method. The POET-DSM Advanced Biofuels joint venture continued to experience delays in the start-up of the factory which management assessed as an indicator for impairment. In the third quarter of 2017 an impairment test was performed by management.

This impairment test was significant to our audit as this test required significant management judgment in determining the expected cash flows to calculate the recoverable amount. Changes for example in projected sales volumes, related variable costs and the anticipated market price for bio-ethanol

may impact the future cash flow projections. The impairment test resulted in the recognition of an impairment of € 65 million.

Our response

In our audit we assessed and tested the assumptions, methodologies, the pre-tax weighted average cost of capital and other data used, for example by comparing them to external data. Key assumptions tested by us include expectations of revenue growth, margin improvements as a result of anticipated improvements in the factory and developments of the market price for bio-ethanol. We included in our team valuation specialists to assist us with these procedures. Furthermore we held meetings with local and corporate management involved in the investment POET-DSM. We assessed the adequacy of the disclosure in Note 10 to the financial statements.

Our observation

We consider management's key assumptions and estimates, that resulted in the recognition of an impairment, to be within the acceptable range and we assessed the disclosure (Note 10) to the financial statements as being proportionate.

Divestment of Patheon N.V.

Description

On 29 August 2017 Royal DSM completed the sale of its investment in Patheon N.V. This sale resulted in a gain on disposal of € 1,250 million. Given the amounts involved, the accounting for this transaction is significant for the financial statements.

Our response

We tested the accuracy and completeness of the reported gain upon the disposal by comparing the consideration received against the terms and conditions according to the Share Purchase Agreement (SPA), the cash receipts and by reconciling the book value of the disposed amount to the underlying accounting records. We verified whether the gain on disposal was calculated in accordance with the relevant clauses of the SPA underlying the transaction. We also evaluated the adequacy of the disclosure (Note 10) of this disposal in the financial statements.

Our observation

We consider that the gain on disposal is appropriately reflected in the financial statements and we assessed the disclosure (Note 10) to the financial statements as being proportionate.

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 which includes the chapters Key data, Letter from the CEO, Report by the Managing Board, Review of business, Financial and reporting policies and Corporate governance and risk management;
- Report by the Supervisory Board which includes the chapters Report by the Supervisory Board and Supervisory Board and Managing Board Royal DSM;
- Other information pursuant to Part 9 of Book 2 of the Dutch Civil Code; and
- Other information which consists of the chapters What still went wrong, Information about the DSM share, Sustainability statements, DSM figures: five-year summary and Explanation of some concepts and ratios.

Based on the following procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements; and
- contains the information as required by Part 9 of Book 2 of the Dutch 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 Dutch Civil Code and the Dutch Standard 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 Dutch Civil Code and the other information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements *Engagement*

We were engaged by the Annual General Meeting of Shareholders as auditor of Royal DSM on 7 May 2014, as of the audit for the year 2015 and have operated as statutory auditor ever since that financial year.

No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific

requirements regarding statutory audits of public-interest entities.

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 Part 9 of Book 2 of the Dutch 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 fraud or error.

As part of the preparation of the financial statements, the Managing Board is responsible for assessing Royal DSM's ability to continue as a going concern. Based on the financial reporting frameworks 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, among other things.

Our responsibilities for the audit of financial statements

Our objective is to plan and perform the audit engagement in a manner that allows us 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 detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A further description of our responsibilities for the audit of the financial statements is included in the appendix to this auditor's report. This description forms part of our auditor's report.

Amstelveen, 27 February 2018

KPMG Accountants N.V.

E.H.W. Weusten RA

Appendix: Description of our responsibilities for the audit of the financial statements

We have exercised professional judgement and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included among others:

- identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the risk resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Royal DSM's internal control;
- evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Managing Board;
- concluding on the appropriateness of the Managing Board's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Royal DSM's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion.

Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern;

- evaluating the overall presentation, structure and content of the financial statements, including the disclosures; and
- evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, 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 group components. Decisive were the size and/or the risk profile of the group components or operations. On this basis, we selected group components for which an audit or review had to be carried out on the complete set of financial information or specific items.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit. In this respect we also submit an additional report to the Audit Committee of the Supervisory Board in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audits of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Assurance report of the independent auditor

To: the Annual General Meeting of Shareholders and the Supervisory Board of Koninklijke DSM N.V.

Our conclusion

We have reviewed the sustainability information in the sections: 'DSM and the Sustainable Development Goals', 'Strategy 2018', 'How DSM creates value for its stakeholders', 'Stakeholders', 'People', 'Planet' and 'Sustainability Statements', as included in the Integrated Annual Report (hereafter: the Selected Sustainability Information) over the year 2017 of Koninklijke DSM N.V. (hereafter: Royal DSM), based in Heerlen, the Netherlands. A review is aimed at obtaining a limited level of assurance.

Based on our procedures performed, nothing has come to our attention that causes us to believe that the Selected Sustainability Information is not prepared, in all material respects, in accordance with the GRI Sustainability Reporting Standards and the internally developed criteria as disclosed in the section 'Reporting policy' on page 99.

Basis for our conclusion

We have performed our review on the Selected Sustainability Information in accordance with Dutch law, including Dutch Standard 3810N 'Assurance-opdrachten inzake maatschappelijke verslagen' (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'.

Our responsibilities under this standard are further described in the section 'Our responsibilities for the review of the Selected Sustainability Information' 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 assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Scope of the group review

Royal DSM is the parent company of a group of entities. The Selected Sustainability Information incorporates the consolidated information of this group of entities.

Our group review procedures consisted of both review procedures at corporate (consolidated) level and at site level. Our selection of sites in scope of our review procedures is primarily based on the site's individual contribution to the consolidated information. Furthermore, our selection of sites considered relevant reporting risks and geographical spread.

By performing our procedures at site level, together with additional procedures at corporate level, we have been able to obtain sufficient and appropriate assurance evidence about the group's reported information to provide a conclusion about the Selected Sustainability Information.

Unexamined prospective information

The Selected Sustainability Information includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherently the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Selected Sustainability Information.

Consistency with the Selected 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 the Managing Board 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 disclosed in the section 'Reporting policy' on page 99.

The Managing Board is also responsible for such internal control as it determines is necessary to enable the preparation of the Selected Sustainability Information in a manner that ensures that this is free from material misstatement, whether due to fraud or error.

Our responsibilities for the review of the Selected Sustainability Information

Our responsibility is to plan and perform the assurance engagement in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

Procedures performed in an assurance engagement to obtain a limited level of assurance are aimed at determining the plausibility of information and are less extensive than 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.

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 apply the 'Nadere voorschriften kwaliteitssystemen' (Regulations on quality management systems) 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.

We have exercised professional judgement and have maintained professional skepticism throughout the review, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our review engagement included, among others, the following procedures:

- Performing an analysis of the external environment, obtaining an understanding of relevant social themes and issues, and of Royal DSM's business;

- Evaluating the appropriateness of the reporting criteria and its consistent application, including the evaluation of the reasonableness of the Managing Board's estimates;
- Evaluating the design and implementation of the reporting systems and processes related to the information in the Selected Sustainability Information;
- Interviewing the Managing Board, 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 the Selected Sustainability Information.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the review and significant findings, including any significant findings in internal control that we identify during our review.

Amstelveen, 27 February 2018

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 2017.

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 2017, 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, 9 May 2018 at 14:00 hours CET.

Important dates

Publication of first-quarter results	Tuesday, 8 May 2018
Ex-dividend quotation	Friday, 11 May 2018
Publication of second-quarter results	Wednesday, 1 August 2018
Publication of third-quarter results	Wednesday, 31 October 2018

DSM figures: five-year summary

Balance sheet¹

x € million	2017	2016	2015	2014	2013 ²
Assets					
Intangible assets	3,058	3,188	3,228	2,867	2,690
Property, plant and equipment	3,313	3,325	3,171	3,673	3,611
Deferred tax assets	281	355	366	427	364
Share in associates and joint ventures	227	586	644	617	247
Financial derivatives	16	-	32	23	69
Other financial assets	475	463	419	275	200
Non-current assets	7,370	7,917	7,860	7,882	7,181
Inventories	1,848	1,800	1,627	1,739	1,638
Current receivables	1,690	1,653	1,556	1,769	1,597
Financial derivatives	41	40	15	24	57
Current investments	954	944	9	6	19
Cash and cash equivalents	899	604	665	669	770
	5,432	5,041	3,872	4,207	4,081
Assets held for sale	-	-	11	37	637
Current assets	5,432	5,041	3,883	4,244	4,718
Total assets	12,802	12,958	11,743	12,126	11,899
Equity and liabilities					
Shareholders' equity	6,962	6,072	5,541	5,723	5,908
Non-controlling interests	103	108	90	213	188
Equity	7,065	6,180	5,631	5,936	6,096
Deferred tax liabilities	259	278	319	365	375
Employee benefits liabilities	356	490	496	479	326
Provisions	151	128	98	105	97
Borrowings	2,551	2,552	2,557	1,637	1,725
Financial derivatives	4	14	182	178	181
Other non-current liabilities	188	158	228	81	75
Non-current liabilities	3,509	3,620	3,880	2,845	2,779
Employee benefits liabilities	39	40	44	45	34
Provisions	53	54	41	42	65
Borrowings	77	853	253	1,143	841
Financial derivatives	20	239	50	184	9
Current liabilities	2,039	1,972	1,842	1,915	1,845
	2,228	3,158	2,230	3,329	2,794
Liabilities held for sale	-	-	2	16	230
Current liabilities	2,228	3,158	2,232	3,345	3,024
Total equity and liabilities	12,802	12,958	11,743	12,126	11,899

¹ Financial derivatives were previously assigned to Current assets and liabilities. The figures have now been distributed over Non-current and Current assets and liabilities.

² Application of IFRS 11 'Joint Arrangements' that came into effect from 1 January 2014. The year 2013 has been restated.

Income statement

x € million	2017	2016	2015	2014	2013
Net sales	8,632	7,920	8,935	9,283	9,429
Adjusted EBITDA ¹	1,445	1,262	1,170	1,166	1,312
EBITDA	1,348	1,146	1,046	1,134	1,187
Adjusted operating profit (EBIT) ¹	957	791	650	617	773
Operating profit (EBIT)	846	657	304	290	476
Financial income and expense	(104)	(133)	(174)	(125)	(144)
Income tax expense	(115)	(89)	(68)	(7)	(76)
Share of the profit of associates and joint ventures	1,154	194	30	(59)	13
Profit for the year	1,781	629	92	99	269
Profit attributable to non-controlling interests	12	8	4	(46)	(2)
Net profit attributable to equity holders of Koninklijke DSM N.V.	1,769	621	88	145	271
Dividend on cumulative preference shares	(8)	(4)	(10)	(10)	(10)
Net profit available to holders of ordinary shares	1,761	617	78	135	261
Key figures and financial ratios					
Capital employed ²	7,766	7,889	7,553	8,105	8,060
Capital expenditure:					
- Intangible assets and Property, plant and equipment	586	485	570	616	694
- Acquisitions	204	16	106	-	424
Disposals	1,546	87	307	93	78
Depreciation, amortization and impairments	502	489	742	798	730
Net debt	(742)	(2,070)	(2,321)	(2,420)	(1,841)
Dividend	331	310	297	296	297
Workforce at 31 December, headcount	21,054	20,786	20,796	21,351	23,485
Employee benefits costs (x € million)	1,768	1,752	1,778	1,713	1,822
Financial ratios ¹					
- ROCE in %	12.3	10.4	8.2	7.8	9.6
- Net sales / average capital employed	1.11	1.04	1.13	1.17	1.18
- Current assets / current liabilities	2.44	1.58	1.62	1.21	1.49
- Equity / total assets	0.55	0.48	0.48	0.49	0.51
- Gearing (net debt / equity plus net debt)	0.10	0.25	0.29	0.29	0.23
- Adjusted EBIT / net sales in %	11.1	10.0	7.3	6.6	8.2
- Net profit / average Shareholders' equity available to holders of ordinary shares in %	28.0	11.1	1.4	2.4	4.5
- Adjusted EBITDA / Financial income and expense	13.9	9.5	7.4	9.9	9.6

¹ In presenting and discussing DSM's financial position, operating results and cashflows, 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 165.

² Before reclassification to held for sale.

Information about ordinary DSM shares

per ordinary share in €	2017	2016	2015	2014	2013
Adjusted Net profit	3.92	2.90	2.14	2.34	2.84
Net profit	10.07	3.52	0.45	0.78	1.52
Operating cash flow	5.65	5.79	3.93	4.62	5.74
Dividend:	1.85 ¹	1.75	1.65	1.65	1.65
- Interim dividend	0.58	0.55	0.55	0.55	0.50
- Final dividend	1.27	1.20	1.10	1.10	1.15
Pay-out including dividend on cumulative preference shares as % of Adjusted net profit	48	61	71	69	59
Dividend yield (dividend as % of average price of an ordinary DSM share)	2.8	3.3	3.5	3.3	3.2
Share prices on Euronext Amsterdam (closing price):					
- Highest price	81.66	64.18	55.11	57.97	59.75
- Lowest price	57.20	41.40	39.62	44.44	43.93
- At 31 December	79.67	56.96	46.28	50.64	57.16
(x 1,000)					
Number of ordinary shares outstanding:					
- At 31 December	174,643	175,002	174,923	173,537	173,963
- Average	174,795	175,100	174,357	172,605	172,183
Daily trading volumes on Euronext Amsterdam:					
- Average	676	787	912	801	728
- Lowest	238	152	130	104	95
- Highest	2,110	2,554	4,506	7,981	3,049

¹ Subject to approval by the Annual General Meeting of Shareholders.

Explanation of some concepts and ratios

PEOPLE

Brighter Living Solutions

See Planet - Brighter Living Solutions.

Eubiotics

The general term 'Eubiotics', is related to the Greek term 'Eubiosis' and relates to feed ingredients that support an optimal balance of microbiota in the gastrointestinal tract of livestock animals. They promote efficient gut performance so as to produce well-nourished animals that get the most from their feed, while at the same time sustaining their health and welfare and protecting the environment.

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:
$$\text{LWC-rate} = 100 * (\text{number of LWCs (past 12 months)} / \text{average effective manpower (past 12 months)})$$

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.

PSI rate

The PSI rate is the number of process safety incidents per 100 DSM employees and contractor employees in the past 12 months:
$$\text{PSI rate} = 100 * (\text{number of PSIs (past 12 months)} / \text{average effective manpower including contractor employees (past 12 months)})$$

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:
$$\text{REC-rate} = 100 * (\text{number of RECs (past 12 months)} / \text{average effective manpower including contractor employees (past 12 months)})$$

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 crude oil and natural gas.

Brighter Living Solutions

Brighter Living Solutions (BLS) are products and services that, when considered over the product life cycle, offer an environmental benefit (ECO+) and/or a social benefit (People+) compared to mainstream reference solutions.

ECO+ qualifications are made based on comparative Eco Life Cycle Assessment (LCA). DSM is using the standard approach to evaluate environmental footprint as published by the WBCSD Chemical sector in 2014. Qualifications are also made based on documented expert opinion by business managers or relevant internal experts based on identified

mainstream reference solutions and identified environmental differentiators.

The People+ qualifications are made based on DSM People LCA method or expert opinions, similar as for ECO+. The People LCA method helps to identify social impacts of products on the dimensions health, comfort and well-being, working conditions, and community development, it is a methodology developed by DSM based on internal standards and external stakeholder dialogues.

More information and definitions can be found on the company website.

Carbon footprint

The total set of direct and indirect greenhouse-gas emissions expressed as CO₂eq.

Carbon price

The price that is paid to emit one ton CO₂eq into the atmosphere. DSM implements an internal carbon price of €50/t CO₂eq.

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.

CO₂

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-efficiency

Eco-efficiency is a concept (created in 1992 by the 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. 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)

Scope 1: Direct GHG emissions

Direct GHG emissions occur from sources that are owned or controlled by the company (i.e. emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.).

Scope 2: Indirect GHG emissions

Indirect GHG emissions relate to the generation of purchased energy (i.e. electricity, heat or cooling) consumed by the company. Purchased energy is defined as energy that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where the energy is generated.

Scope 3: Value chain emissions

Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Location-based emissions

Reflects the average GHG emissions intensity of grids on which electricity consumption occurs (using mostly national grid-average emission factor data). Corresponding emission factor: in most cases, the country emission factor.

Market-based emissions

Reflects GHG emissions from electricity supplies that companies have purposely chosen (or their lack of choice) and contracted. Corresponding emission factors:

- supplier specific emission factor (provided by the supplier)
- residual emission factor (country based grid factor, corrected for allocated purchased electricity from renewable resources)

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. GHGE 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 UN 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.

Levelized Cost of Energy (LCOE)

LCOE is a figure used to compare the average cost of energy coming from different sources. It measures the cost of energy production over the lifetime of an asset like a photovoltaic panel.

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.

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).

SO₂

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 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.

High-growth economies

High-growth economies relate to the following regions: Latin America, Middle East, Asia (excluding Japan) and Eastern Europe.

Innovation sales

Innovation sales are defined as sales from products and applications that have been introduced in 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 from continuing operations 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

ADR	American Depositary Receipts	ILO	International Labour Organization
AFM	The Dutch Authority for the Financial Markets	IP	Intellectual Property
API	Active Pharmaceutical Ingredients	IPO	Initial Public Offering
APM	Alternative performance measures	LCA	Life Cycle Assessment
BRA	Business Risk Assessment	LoR	Letter of Representation
CDP	The new name for the Carbon Disclosure Project	LTI	Long-Term Incentive
CEFIC	Conseil Européen des Fédérations de l'Industrie Chimique (European Chemical Industry Council)	LWC	Lost Workday Case
CGU	Cash Generating Unit	NGO	Non-Governmental Organization
COA	Corporate Operational Audit department	NPS	Net Promoter Score
CoBC	Code of Business Conduct	OCI	Other Comprehensive Income
COD	Chemical Oxygen Demand	OECD	Organisation for Economic Co-operation and Development
CPLC	Carbon Pricing Leadership Coalition	OEM	Original Equipment Manufacturer
CRA	Corporate Risk Assessment	PA	Polyamide
CRP	Corporate Research Program	PDN	Stichting Pensioenfonds DSM Nederland
CSD	Corporate Strategy Dialogue	PPA	Purchase Price Allocation
CSR	Corporate Social Responsibility	PRA	Process Risk Assessment
DHA	Docosahexaenoic acid	PSI	Process Safety Incident
DNP	DSM Nutritional Products	PV	Photovoltaic
DSGC	Dutch Sustainable Growth Coalition	R&D	Research & Development
DSP	DSM Sinochem Pharmaceuticals	REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
EBA	Emerging Business Area	ROCE	Return on Capital Employed
EBIT	Earnings before interest and taxes (Operating Profit)	SAR	Share Appreciation Rights
EBITDA	Earnings before interest, taxes, depreciation and amortization	SDG	Sustainable Development Goal
EEl	Energy Efficiency Improvement	SHE	Safety, Health and Environment
EPA	Eicosapentaenoic Acid	SPF	Sun Protection Factor
EPS	Earnings per share	SSP	Supplier Sustainability Program
FIFO	First in, first out	STI	Short-Term Incentive
FTE	Full-time equivalent	SUN	Scaling Up Nutrition Movement
FX	Foreign exchange	TCFD	Taskforce for Climate-related Financial Disclosures
GHG	Greenhouse gas	TDC	Total Direct Compensation
GHGE	Greenhouse-gas emissions	TSR	Total Shareholder Return
GMM	Genetically Modified Micro-organisms	UN	United Nations
GRI	Global Reporting Initiative	UNGC	United Nations Global Compact
IAS	International Accounting Standards	VOC	Volatile Organic Compound
IASB	International Accounting Standards Board	WBCSD	World Business Council for Sustainable Development
IFRIC	International Financial Reporting Interpretation Committee	WEF	World Economic Forum
IFRS	International Financial Reporting Standards	WFP	United Nations World Food Programme



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