



DSM IN GREATER CHINA INTEGRATED REPORT 2017

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.

DSM – Bright Science. Brighter Living.™

Royal DSM is a purpose-led global science-based company in Nutrition, Health and Sustainable Living. DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders. DSM delivers innovative business solutions for human nutrition, animal nutrition, personal care and aroma, medical devices, green products and applications, and new mobility and connectivity. DSM and its associated companies deliver annual net sales of about €10 billion with approximately 23,000 employees. The company is listed on Euronext Amsterdam. More information can be found at www.dsm.com.

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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.

PROFIT

€ 8,632

Net sales (in millions)

€ 1,445

Adjusted EBITDA (in millions)

15%

Adjusted EBITDA growth versus 2016

€ 996

Cash provided by operating activities (in millions)

€ 1.85

Proposed dividend per ordinary share for 2017

€ 546

Capital expenditure (cash-based)

€ 1,781

Net profit (in millions)

+190

ROCE growth (in bps) versus 2016

€ 10.07

Net earnings per ordinary share

12.3%

ROCE

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

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

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

PEOPLE

21,054

Workforce (at year-end 2017, excluding affiliates)

17%

Female executives

27/73

Female/male ratio

75%

Employee engagement index

0.36

Frequency Index of Recordable Injuries

PLANET

26%

Greenhouse-gas efficiency improvement, cumulative versus 2008

21%

Purchased electricity from renewable sources

21%

Innovation sales as % of total sales

3%

Energy efficiency improvement

23

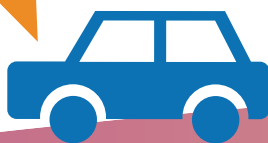
Water consumption (in million m³)

BRIGHTER LIVING SOLUTIONS

62%

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

90% of cars sold today contain our materials.



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



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About the Report

The “DSM in Greater China - Integrated Report” is published annually as a concise document about the performance of our activities across the three dimensions of sustainability – People, Planet, and Profit – in Greater China.

The reporting period for this publication is the calendar year 2017.

The People data for newly acquired companies are reported from the first full month after the acquisition date. The employee numbers refer to employees within the DSM Group scope of consolidation as of December 31, 2017.

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.

KEY DATA FOR DSM GREATER CHINA 2017

	2017*	2016
People		
Workforce by Dec. 31	4924	4237
Female / Male ratio	28/72	29/71
Frequency Index of recordable injuries (per 100 employees; DSM and contractors)	0.15	0.15
Planet		
Energy use (in Petajoules)	2.48	1.85
Energy Efficiency Improvement (in %, reference 2015)	-8%	-20%
Greenhouse-gas emissions in CO ₂ equivalents (x million tons)	0.19	0.15
Greenhouse-gas efficiency improvement (in %, baseline 2008)	40%	33%
SO ₂ + VOC + NO _x (tons)	980	864
Water consumption (in million m ³)	1.3	1.1
Environmental incidents (cases)	5	1
Profit (in CNY million)		
Net sales 2017 Greater China, continuing operations	9068	8031

* Key data presented relates to DSM Greater China Region (in China mainland, Hong Kong and Taiwan). The data of the newly acquired sites cannot be included in the efficiency improvement indicators, since there is no prior reference year available.

LETTER FROM DSM CHINA PRESIDENT

Dear reader,

2017 was a year of rapid change that pushed limits. Driven by the advent of advanced technologies, the business environment changed faster than ever before. With more stringent regulatory demands and higher expectations from customers, only the businesses that are responsive enough and are able to navigate the changing marketplace can stay at the forefront. With our deep understanding of the local market rooted in our early presence in China, DSM is well positioned to adapt to change, maintain our competitive edge, and pursue sustainable growth in China.

In 2017, DSM's Business Groups/Units in Greater China continued to achieve good sales of over RMB 9 billion. This year, we will continue to step up our efforts at full speed to execute DSM's Strategy 2018: *Driving profitable Growth*. The strategy aims to capture the potential of the business portfolio that has been created, and DSM will translate this into improved financial results. In China, traditional and newly-developed business will contribute to a large extent to DSM's long-term success and commitment.

Our Life Science cluster achieved sustainable growth in 2017. The growth was further strengthened with the successful acquisition of Inner Mongolia Rainbow Biotechnology Co., Ltd. (China), a high-tech enterprise that focuses on R&D, production, and application technology innovations of bio gum solutions. This bolstered DSM's ability to serve its global and diverse customer base through an expanded hydrocolloid product portfolio applied in personal care, food and beverage products that can provide texture and stability. The opening of the sixth premix plant in Shandong Province marked DSM's expanded footprint towards serving a larger geographical area in China. The new facility enhanced DSM's production capacity of premix for poultry and swine, supporting the feed industry and capitalizing on opportunities that arise from the country's direction in optimizing the livestock sector with improved efficiency and sustainability.

In 2017, DSM's Materials Science cluster also grew steadily in the face of changing demand for quality products that are also multifunctional and environmentally friendly. DSM Engineering Plastics will continue to be a trusted partner in driving sustainable growth for customers, while pursuing a better world through our commitment to People, Planet and Profit. DSM worked with ZTE, one of the world's biggest telecom equipment makers, and provided Arnitel®, a high-performance engineering thermoplastic, for their Quartz smartwatch, utilizing its well-balanced physical and chemical properties.



DSM helped ZTE reinforced its leading position in information technologies through the launch this high-end wearable. DSM Resins & Functional Materials has also achieved a milestone in 2017 as waterborne coatings became compulsory since April. This marked over five years' of concerted efforts through our partnership with Waterborne China Platform (WBCP) and Container Owners Association (COA). This shift was significant to the environment conservation in China since it can reduce VOC emissions from the industry by 90 percent.

We have taken major steps in developing our Emerging Business Areas (EBAs) in China. DSM's Advanced Solar business (DAS) acquired the technology and other assets of Suzhou Sunshine New Materials Technology Co., Ltd. In 2017. This aimed to expand our product portfolio for the solar photovoltaic market with polymer sheets that help protect photovoltaic solar cells. The acquisition demonstrated DSM's ambition in supporting the growing needs for local products made for global consumption and in expanding China's clean and green energy market through our expertise in both material science innovation and technology.

At DSM, sustainability is a key differentiator and business driver. In 2017, DSM was named in the “2016-2017 Most Respected Companies in China” list published by The Economic Observer, one of the major economic-focused newspapers in China. The award recognizes companies that have demonstrated excellence in areas of financial performance, operations and management, innovation, corporate social responsibilities, etc., all while providing a sustainable, trusted value system for today’s economy. It served as a testimony to DSM’s commitment towards delivering science-based, sustainable and scalable solutions that face up to the challenges our world faces today.

This year, we have taken major steps to strengthen DSM’s positioning as a truly global company working as one big team under our One DSM Culture Agenda. Starting from May 2017, over 400 employees from the sales offices across all business groups in DSM Taiwan started to work under one roof at the new office. With the close collaboration among groups, we are poised to drive even greater business growth.

Nothing compares to safety. At DSM, we set targets and monitor performance regarding both personal and process safety. In China, the Frequency Index of Total Recordable Injuries reached 0.15 at the end of 2017. We will continue to pay close attention to employee and contractor safety.

China is one of the most important markets for DSM. We constantly strengthen our technology competencies to develop products and solutions that span across areas of food, feed, nutrition, new materials and new energy. To stay ahead, we are always on the lookout for sustainable opportunities. We have a portfolio of solutions in place for our customers to capture market opportunities and achieve business goals. Most importantly, everything we do aligns our progress with our purpose-contribution to a more sustainable world. To us, achieving sustainability means simultaneously pursuing economic performance, environmental quality, and social responsibility.

Our close relationship with employees and external stakeholders is the cornerstone of our sustainable growth and long-term success in China. Our firm belief in mutual trust and transparency are the catalysts of such close working ties, and we inform our stakeholders on a regular basis about our performance and progress across our commitment to People, Planet and Profit. On behalf of the DSM China Leadership Team, I’d like to thank all our partners, customers and stakeholders for your trust and support. We look forward to working even more closely with you in the future. Let us keep up the momentum and build on our strong foundation to create value and contribute to a more sustainable world together.



Dr. Jiang Weiming
DSM China President

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 Sustainable Development Goals' (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



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 transitions 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.

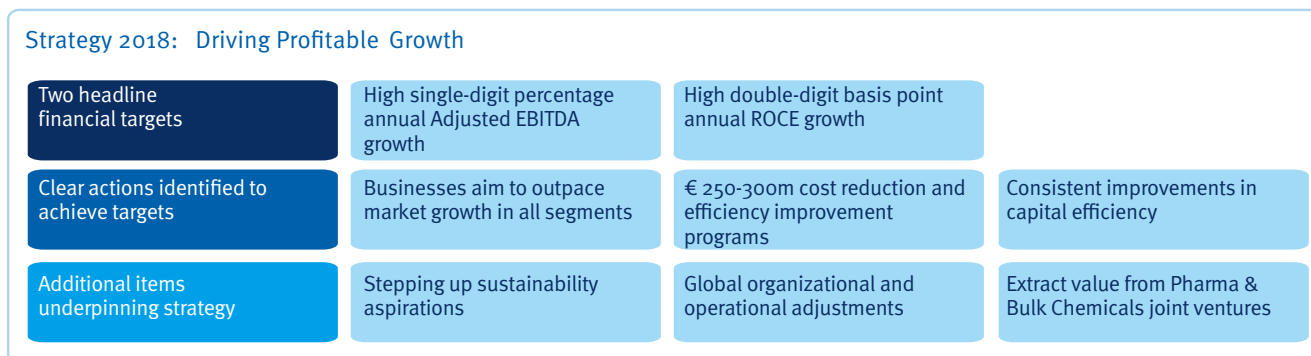


The DSM Managing Board (from left to right): Dimitri de Vreeze, Geraldine Matchett (CFO) and Feike Sijbesma (CEO/Chairman).

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.

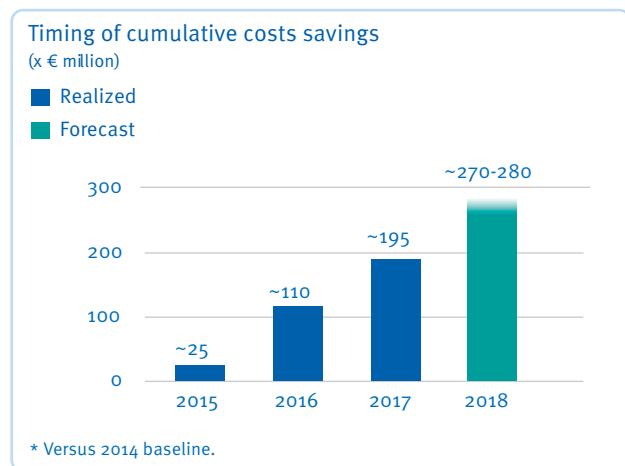
Stepping up DSM's financial performance and sustainability aspirations

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;
- 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).

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.

“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

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%.

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.

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.

	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
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Brighter Living Solutions

65% ECO+/People+ (running business)	62%
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GHG Efficiency Improvement

40-45% (2008-2025)	26%
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Energy efficiency improvement

>10% (2015-2020)	3%
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Purchased electricity from renewables

50% by 2025	21%
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Employee Engagement Index

Toward 75% favorable	75%
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Safety

0.25 Frequency Index of Recordable Injuries	0.36
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Diversity

25% Female executives	17%
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60% Executives from under-represented nationalities	56%
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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.

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.

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.

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.

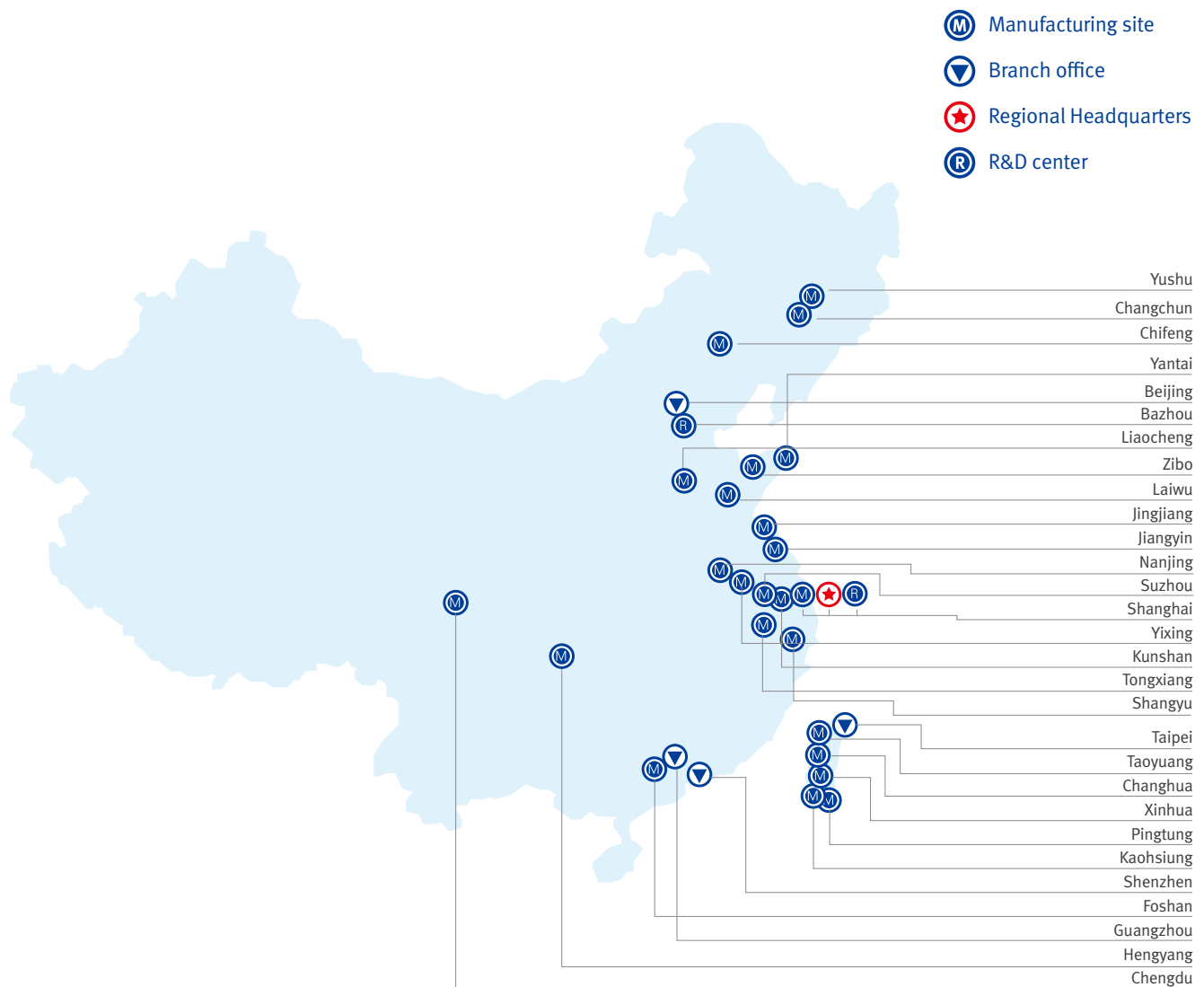
With all of these developments ahead of plan, we brought forward our regular strategy review process for the period beyond 2018.



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).

DSM IN CHINA OVERVIEW





DSM ACTIVITIES IN CHINA

DSM is active across almost its entire portfolio of Life Sciences and Materials Sciences in China, serving the end markets including food and dietary supplements, personal care, feed, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials.

DSM began trading with China in 1963 and established its first China sales office and first manufacturing facility in early 1990s. The company currently has 49 affiliates in China including 25 manufacturing sites and employs about 4,924 people. DSM China regional headquarters and China Science and Technology Center is located in Shanghai. DSM's business is growing healthily and steadily in China with sales revenue reaching over CNY 9.0 billion in 2017.

Facts and Figures, DSM Greater China (as of December 31, 2017)

7 branch offices
25 manufacturing sites
49 affiliates

Sales

CNY
9.068 billion

Employees

4,924

1963-2005

STARTING BUSINESS IN CHINA

1963

With the first Urea License, DSM starts trading with China.

1993

DSM establishes Representative Office in Beijing.

1995

The first production facility is established in Jiangyin to manufacture polypropylene chip compounds.



2005-2008

DEEPENING ENGAGEMENT

2005

As the biggest emerging economy, China becomes the focus of DSM's corporate strategy Vision 2010. DSM adds more than 10 manufacturing sites in China, and opens its China R&D Center in Shanghai. DSM enters collaboration with Shanghai's Fudan University to set up a Joint Laboratory.

2007

Premier Wen Jiabao recognizes DSM Citric Acid (Wuxi) Limited in China as a "Good Corporate Citizen".

2008

In the run-up to the Beijing 2008 Olympics, DSM stepped up its efforts in the fields of sports and innovation, contributing to sporting success.

DSM publishes its first China sustainability report.



HISTORY

DSM GROWS WITH CHINA

2008-2017

GROWTH AND TRANSFORMATION



2009

DSM opens its new China Campus the new seat of its Regional Headquarters and R&D Center in Shanghai. As one of the first LEED (Leadership in Energy and Environmental Design) Gold-certified buildings in China, it is a symbol of DSM's sustainable development.

2010

The first DSM Hope Primary School in China opens on June 1, Children's Day. It is located in Qiaoxi Township of Guangyuan city, Sichuan province. The school was devastated by the Sichuan earthquake in 2008.

2011

DSM starts up its China Science and Technology Center as the company's main innovation base in China.

2012

DSM Sinochem Pharmaceuticals opens new 6-APA intermediate plant in Jilin Province.

2013

DSM's investment in Yantai Andre Pectin Co.,Ltd. creates a China-based hydrocolloids growth platform. The acquisition of German chemical company Bayer's premix activities in China further expands DSM's global premix network. On May 31, DSM opens its second DSM Hope Elementary School, in Lintao County, Gansu Province.

2014

DSM launches a food specialties world-class enzyme facility in Jiangsu to serve both the local and global markets. In the same year, DSM opens a new animal nutrition center in Bazhou to support the Chinese livestock production industry.

2015

DSM finalizes the acquisition of Jiangshan Pharmaceutical, which allows DSM to further strengthen its position in vitamin C market. DSM's Hydrocolloids Business Unit breaks ground for its gellan gum site expansion at DSM Zhongken Biotechnology Co., Ltd. in Tongxiang, to make a world-class development center for hydrocolloids including gellan gum.

2016

DSM opens its state-of-the-art vitamin B6 facility in Shanghai Xinghuo Site. DSM and NHU officially inaugurates the joint venture to produce high performance PPS compounds. DSM opens its Asia Pacific Personal Care Technical & Application Center in Shanghai.

2017

DSM expands solar product portfolio with "Sunshine" (Suzhou SunShine New Materials Technology Co., Ltd.) technology acquisition.

DSM Animal Nutrition and Health opens its sixth state-of-the-art, premix plant in Shandong Province, China.

DSM strengthens its Hydrocolloids business with the acquisition of Inner Mongolia Rainbow Biotechnology Co., Ltd. (China).

PEOPLE IN 2017

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 do-ers who can further develop our company's capabilities while actively developing their own credentials and careers. Above all, we aspire to be an injury and incident-free organization.

Our People Strategy 2018 supports the company's overall strategy by focusing on three pillars:

1. Agile employees
2. Skilled employees
3. Accountable employees.

These three pillars reinforce the most relevant material topics for our people:

HEALTH & WELLNESS

CAREERS & EMPLOYMENT

RESPONSIBLE BUSINESS PRACTICES

HEALTH & WELLNESS

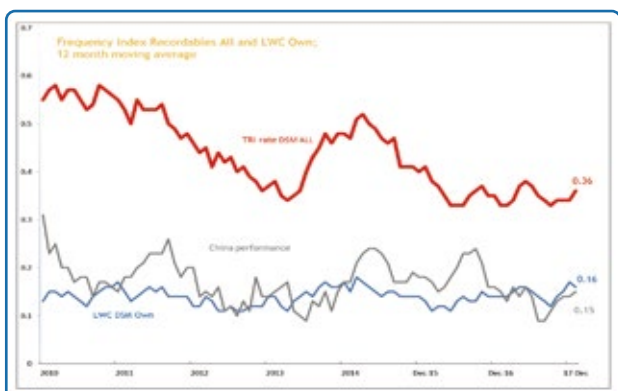
Occupational and process safety

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.

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 40-41.

Safety Performance (2017)	DSM China Realization	DSM Global Realization	Aspirations 2020
TRI-all (Total Recordable Injury)	0.15	0.36	TRI-all < 0.25

Occupational safety incidents can be measured through a Frequency Index of Total Recordable Injuries in which Fatalities, Lost Workday Cases, Restricted Workday Cases and Medical Treatment Cases of all persons present on-site are shown – employees as well as contractors and visitors. DSM aims for a Frequency Index of Total Recordable Injuries (per 100 DSM employees and contractor employees) that is less than or equal to 0.25 by 2020. For DSM China, this target is also valid. DSM China has made steady progress, and has organized many SHE activities with the target of improving occupational safety over the years. In 2017, the Frequency Index of Total Recordable Injuries in China was steady at 0.15, compared to 2016. No fatalities occurred in 2017, which means that DSM China has been free of fatalities for sixteen years in a row. This result was achieved through safety culture promotion, people competence development and a loop-closing improvement cycle. This cycle starts with opportunity identification through observations, goes through audits & incident/near miss investigations, and closes with an effectiveness review of improvement actions taken.



Process safety

Process safety incidents are rare but can have a major impact on people and the environment. Since 2015, DSM has been measuring process safety according to standards of the International Council of Chemical Associations, with a target for 2020 of a 0.15 Process Safety Incident Rate (per 100 DSM employees and contractor employees). The Process Safety Incident rate at DSM Global improved from 0.28 in 2016 to 0.19 in 2017. Most incidents consisted of the unintentional release of substances from plants or storage facilities, and were remedied without further consequence to people or the environment.

In China, DSM continuously manages process safety to guarantee a consistently sustainable performance. In 2017, all newly acquired sites in China have undergone a high-risk assessment immediately after closure of the transaction to identify potential high-risk issues in process safety. If needed, plans based on the Inherently Safer Design concept which focuses on avoiding hazards rather than on controlling them were developed and implemented to eliminate or control previously existing process safety risks. Only after all high-risk issues were mitigated, were the newly acquired facilities allowed to start production.

Prevention of hazards related to flammable dust is an important aspect of process safety for DSM China, since all its sites handle flammable powders in one or more stages of their manufacturing process. Correct safety data are the foundation of safe powder handling. In that respect, DSM’s sites have implemented various measures. For review the dust explosion properties of complex dust mixtures – rather than only those of pure materials, since in major parts of the process, powder is handled in the form of mixtures instead of a pure material. Strictly controlling the ignition source is key to dust explosion prevention. The Kunshan site has invested RMB 1.2 million to overhaul its dust collection system. The explosion-proof design of the new system goes beyond electrical equipment standards as required by Chinese National codes, extending to non-electrical equipment. In doing this, the dust collection system meets all relevant international standards.

SHE knowledge & information sharing by wechat platform at Animal Nutrition & Health China sites

SHE knowledge and information sharing is a good tool for individual employees to improve their safety awareness. This includes learning tools to avoid some incidents/injuries happening again. In 2017, Animal Nutrition & Health China has set up a WeChat platform where all its sites can share some key SHE-related news, information about incidents, observations from Behavior Based Safety programs or SHE incident flyers. The platform also allows to conduct employee online learning.

This kind of WeChat exchange platform is very convenient, especially for those employees who are constantly on business trips. The employees can share their work experience or knowledge.

The WeChat SHE platform has become a key platform and bridge for internal communication and learning among all Animal Nutrition & Health China sites.



Animal Nutrition & Health WeChat SHE platform

SHE knowledge contest/Q&A by company WeChat platform at the Laiwu site

High employee participation rates in SHE activities is a good indicator for a site's SHE culture. On a related WeChat platform run by the Laiwu site, questions testing SHE knowledge are posted daily, which can be attempted by all employees. Those employees responded with correct answers will then be scored and receive some points. Every month, the site hands out rewards to the highest-scoring employees. Many employees at Laiwu actively participate in this program.



Laiwu site WeChat platform for SHE knowledge sharing

Vitality@DSM program at Shunde site

It is important for every site to control high and medium risks by ensuring the effectiveness of the control measures. Front-line employees play a critical role in monitoring the availability of these control measures. To this end, the Laiwu site starts in 2017 a program aiming at providing front-line employees with the sufficient knowledge of high and medium risks and their control measures.

At the beginning of 2017, a team at the site conducted a review and collected all high and medium risks and the respective control measures for these risks. These include, among others, process safety risks, machine safety risks, occupational safety risks, occupational health risks. The site printed a summary of all risks and measures as a brochure, and shared copies with shift team leaders. Shift leaders and supervisors then shared

the information and trained line employees accordingly. Finally, the site has set up a team to conduct a field check to verify the control measures' effectiveness. Equipped with better understanding of the why and how of risk control measures, the team identified a number of potential improvement opportunities, which were summarized and reviewed for further actions.



Laiwu site handbook on risk control

Cleaner production program at Kunshan site

In 2017, the management of DSM's Kunshan site has set up a Cleaner Production Program. As part of the program, a specially assigned team has developed plans on how to improve the production with respect to the environment. All site functions such as Maintenance, Production or Purchasing were mobilized and integrated to pursue the shared goal of an increased site sustainability performance together.

A total of 18 improvement proposals were addressed. 14 of them were available at zero/low cost, as most of them were related to continuous improvement or routine actions. Another four proposals carrying middle/high cost were implemented following a project management process. These projects included the installation of a high-efficiency dust collector, a thermal oil light-ends removing package unit, upgrading construction material for the diesel system to stainless steel in order to minimize the likelihood of leakage, and installing a Continuous Emission Measurement System to improve accuracy of emission data.

The intermediate report of the site's Cleaner Production Program was reviewed by local authorities and expertise, and has won high recognition. All the four installation projects were completed by the end of 2017, with positive feedback and verified results based on emission measurements from third parties. The final report of the Cleaner Production Program has confirmed the achievements realized.



Kunshan site Cleaner Production Program

Involvement of everyone and safety star program at the Zhangbin site

An active Safety culture is an important part of life at DSM. The Involvement of Everyone Program was kicked off at the Zhangbin site in January 2017, aiming to take the safety culture to the next level. As part of the program, the site expanded participation levels of safety observations, GEMBA walk and so-called safety story sharing, during which employees of all levels can demonstrate leadership and involvement. The site also launched regular safety communication meetings for all employees, consisting of more than five meetings for each shift or department per month. Shift leaders host these meetings to facilitate and encourage employees to speak out about safety. Furthermore, the site has started a safety star program to promote and recognize role models and good performers. This Involvement of Everyone Program is a long-term program that continuously promotes safety culture.



Zhanfbin site SHE star program

Employee health management

DSM controls and reduces health risks at the workplace based on three pillars: prevention, primary care and promotion. This is driven by our emphasis on a healthy and safe work environment, as all our employees deserve excellent working conditions.

With regard to prevention, we continue to develop our employees' health risk assessment competence to make sure industrial hygiene competence availability is guaranteed at all DSM China sites. DSM China sites also implemented many engineering and technical measures to reduce employees' exposure risk, for example, noise control engineering projects at the Jiangyin site.

Primary care includes our emergency preparedness, first aid and our site-based medical professionals. Health promotion is addressed through our emphasis of health and fitness, as well as through our Safety, Health and Environment policies.

As for promotion, DSM fosters a culture of health with its Vitality@DSM program. Generally, the program is based on four vitality pillars: nutrition, recovery, exercise and mental

health. It is a voluntary program to help employees assess and track their own physical, social and mental well-being. DSM has made relevant guidelines on how to tackle unhealthy habits available to employees seeking advice.

In addition, DSM sites provide diversified activity opportunities that promote employees' health, such as Yoga, Tai Chi, physical exercise, a spine management program, etc. DSM China also continues to participate in DSM's Global Corporate Challenge, a team-based approach to better health. In 2017, 39 teams from DSM China participated in a challenge to increase walking by counting steps. The daily step average of the people taking part was 17,127, with average energy burnt of 2877 KJ per day.

In September 2017, DSM China launched a health care program to help employees getting better sleep. Good quality sleep plays a very important role for our general health. A face-to-face assessment and instructions on how to improve sleep were provided to employees. About 490 employees took part. They are now applying the insights they gained from the program, and adjust their lifestyle where necessary.

Occupational health cases

Even with these programs, work can sometimes negatively impact employees. One case that was reported at DSM China in 2017 was related to heat stress at the workplace. At the DSM Jiangshan site, which was acquired in 2015, 14 people have shown indications of hearing loss, as we discovered in December 2017 as part of the site's integration program during which improved medical checks were performed. This issue is still under investigation and was therefore not yet included in the figures reported.

Moreover, 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 occupational health risks and encourages report transparency.



Vitality@DSM program at Shunde site

CAREERS & EMPLOYMENT

Workforce engagement

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

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 DSM employees, and a total of 2,355 employees completed the questionnaire in China. The high participation rate contributes to revealing a comprehensive picture of what is working well and where we need to improve further. The prime focus of the survey is DSM’s Employee Engagement Index, which is a combination of perceptions that have a positive impact on behavior. These perceptions include satisfaction, commitment, pride, loyalty, a strong sense of personal responsibility, and a willingness to be an advocate for the organization.

In 2017, the Employee Engagement Index in China was at 74%, slightly up from 73% in 2016. We are happy to see that four Drivers for Engagement-Pride, Retentions, Referral and Satisfaction-are slightly up compared with 2016. From amongst the Engagement Index questions, 82% employees agreed on “I am proud to work for DSM”, an increase compared to the 77% in 2016. This shows us a general increase in engagement as well as our employees’ optimism. It is also a sign that we are on the right path, both in terms of our business as well as people practices. (Meanwhile, for the highest-performing companies and organizations around the world, the benchmark number is 82% in Engagement Index. This is the league in which DSM aspires to be, and we have set an intermediate target for 2020 of getting close to 75%.)

In addition, through a group of other questions, the Engagement Pulse Survey provides further essential information about our peoples’ view on how DSM is doing. This regards various aspects such as new strategy, working conditions, open communication, career development, sustainability and Inclusion & Diversity and was summarized as Index score for each topic. We are delighted to see that almost all the favorable scores at DSM China are ahead of the overall DSM global norm. Taking the Strategy Index as an example, the favorable scores of the three questions for this topic were all higher than 2016, which shows the strategy for

the period of 2016-2018 has been positively embraced by the employees, and that our employees are undertaking joint efforts to carry out this strategy going forward.

The results also show that the company has improved people management. For example, 75% of employees agreed to the sentence “My manager has invested time and effort in my growth and development”, up from 71% in 2016. Still, there is room for further improvement, so we will continue to develop our people managers.

Inclusion & diversity

DSM’s Inclusion & Diversity activities focus on two main topics:

- Increasing representation of women and under-represented nationalities at the 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 can contribute 100%.

We aim to have 25% female executives, and for at least 60% of executives to come from under-represented nationalities by 2020. In 2017, we globally achieved our short-term target of an improvement in each category by 2%, 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 the executive level reached 56%, just a few points away from our long-term aim.

In 2017, the DSM China Women Inspired Network (WIN) continued its activities to create a culture of diversity and inclusion in the organization, and to encourage women’s career development and work-life balance by setting up dialogues, building internal and external networks and organizing trainings.

In Q2, WIN China organized a panel discussion of “Your Definition of Success” at several sites, to help people, especially female employees to find their own triggers for success.



“Your Definition of success” events at DSM sites

In Q3, a dialogue between members of the global HR leadership team and DSM China female employees was held in Shanghai. Female staff from several departments shared their views with the global HR leadership team about what success means to them. This dialogue helped the global HR leadership

team to better understand the status and ambitions of female employees in China with respect to their career development. Moreover, the exchange as well as some suggestions from the global HR leadership team have inspired the female participants from DSM China.



WIN dialogue meeting with DSM global HR Leadership team



WIN organized career training for female colleagues

In Q4, WIN China invited an external trainer from training company POA to give a lecture to female professionals on how to identify objectives, look for partners and take actions in pursuing a career.

IDENTIFYING AND DEVELOPING FUTURE TALENT

China Young Talent Program



DSM Young Talent Program

DSM's China Young Talent Program aims to find, recruit and nurture young talents across China. The goal is to hire the best-in-class Chinese graduates, and then support them to accelerate the growth of their professional skills and enrich their business knowledge. This way we are creating a healthy inflow of young talents into the DSM China talent pipeline. New recruits proceed through an 18-month learning & development journey kicked off annually in November, aiming to develop them to be skilled professionals when graduating from the program.

2017 has been the fourth year of the China Young Talent Program, during which 11 master graduates joined us on

various positions in several business groups, starting their professional life in DSM.

At the same time, we had eight young professionals from the 2015 China Young Talent Program “graduating” in 2017, ready for their next challenging assignment.

China materials sciences commercial board and China life sciences commercial board

To promote talent mobility across business groups, functions and locations, two commercial boards were established in Q2 2017: The China Materials Sciences Commercial Board and the China Life Sciences Commercial Board. DSM China President, Dr. Jiang Weiming, has also joined both commercial boards as he is dedicated to talent development. Enhancing cross-business mobility and functional capability are the two key themes discussed by the commercial boards. With the commitment from all business leaders and the DSM China President, we have seen an increase in the number of cross business employee transfers for key commercial positions in 2017.

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.

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 Asia-Pacific regions, 16 of DSM’s Manufacturing and Supply Chain organizations are implementing DICI. We gradually build a Continuous Improvement culture with regional characteristics. For example, we have established a DICI Academy for the APAC region which offers a series of theoretical and practical courses on how to train employees for more than 200 key roles that are crucial for DICI implementation. Among them are Site Facilitators, Mindset & Behavior leaders, or internal trainers. People who finish the courses will be certified and will be acting in their roles when back at their job, engaging other employees in continuous self-improvement or giving workshops. Moreover, the APAC operations team holds regular DICI Best Practices calls and platform meetings. At the shop floor level, so called one-point lessons visualize examples for concrete improvements on one A4 page each as a practical method to share situational problem-solving experiences.

The Jiangyin, Shunde and Kunshan sites developed specific sets of necessary capabilities were developed for each shop floor team employee. The necessary knowledge and skills are listed there to guide individual development. As a result, the support and coaching of the management team become more focused. Meanwhile, a related recognition and rewards program was set up at the sites to inspire people. It accelerates changes of people’s mindset and behaviors. As a critical element, the management team’s skills in guiding their employees improves as well as they have started to regularly apply them. Projects such as Gemba walk and Coaching which help to release employees’ potential have become part of their job routine.

PLANET IN 2017



There is only one earth. Sustainability is DSM's 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.

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 (SDG), a collection of 17 global goals set by the United Nations — among them we pursue especially SDG 7 (Affordable and Clean energy), SDG 12 (Responsible Consumption and production) and SDG 13 (Climate Action).

Planet performance in DSM CHINA

The table below shows the 2017 performance of DSM China (including sites in Taiwan) and DSM Global in key environmental indicators against a respective base year. Most of the environmental indicators have a target period of 2016-2020/2025 with 2015 as the baseline. They are on

track to be met by 2020/2025 - if they haven't already been met early.

All environmental targets are relative targets. This means that increases or decreases result from calculations that take changes in production volumes into account.

Key Environment Indicators*	DRCP (2016-2020/2025) Target	Realization of DSM China 2017	Realization of DSM Global 2017
GHG efficiency improvement (Baseline 2008)	40-45% (2008-2025)	40%	26%
GHG efficiency improvement (Annual Improvement)	-	3%	4%
Energy efficiency improvement (Baseline 2015)	>1% annually (>10% in 2025, reference 2015)	-8%	3%
Electricity purchased from renewable sources	50% in 2025	0%	21%
Reduction of emissions to air per unit of product (VOC, NOx, SO2)	40% in 2020 (reference 2015)	62%	41%
Waste	80-90% recycled by 2020	79%	84%
Water	Water risk assessments completed on 90% of selected sites by 2020	100%	100%

* Key data presented relates to DSM Great China Region sites (both sites in China mainland and in Taiwan)

Greenhouse-gas (GHG) emissions

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 by 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.

In 2017, by including the Taiwan sites' planet performance, DSM China emitted a total of 0.19 million tons of CO₂ equivalent which was higher than the 0.15 million tons emitted in 2016. However, DSM China's GHG efficiency improved further from 33% in 2016 to 40% in 2017 versus our 2008 baseline. Most of the efficiency improvements due to the success of our energy efficiency projects implemented in China.

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 time. To contribute to this global target, a

number of potential initiatives at DSM's various China sites to further reducing their GHG emissions are have been put forward for feasibility study in 2017.

Rooftop solar power project at Jiangyin site

In 2017, DSM Engineering Plastic has committed ourselves for using 100% renewable electricity for Apple production. Jiangyin site in China got a capex approved for 2 million euros to install solar panels to generate renewable electricity for the specific Apple production line. By this project, around 15.3TJ/a primary energy will be replaced from coal source to renewable source which results in a reduction of 1,239 mt CO₂/year.

Energy consumption

In 2017, we continued our energy efficiency improvement journey which is the most cost-effective way to reduce GHG emissions in our operations. DSM's energy efficiency program has a dedicated annual investment budget to support those projects that have a longer payback period than typical business projects. In 2017, DSM Global approved about 30 energy efficiency projects 7 out of which are located in the Greater China region.

DSM's total annual energy consumption in China increased from 1.85 to 2.48 petajoules in 2017, while DSM China's energy efficiency was 8% lower compared to the baseline year 2015. The deterioration was mainly due to product portfolio shifts towards more energy intensive products at the DSM Nutritional Products sites in China. More energy improvement opportunities were identified in 2017 to reduce the negative impacts of this shift to overall energy efficiency in Great China.

In 2017, DSM China has implemented several projects to reduce energy consumption or to increase energy efficiency. DSM China also initiated studies to identify further options to improve energy efficiency in the years to come. The typical options identified by the study were projects replacing low-efficiency motors and old models of equipment, recovering waste heat, optimizing energy using system and setting up a systematic energy management approach.

Energy saving projects at Tongxiang site

Replacing low-efficiency facilities and installation of Variable Speed Driver on big motors

Tongxiang site replaced all its low-efficiency motors with new high-efficiency motors. After finishing this project, the annual energy consumption will reduce by 27,000kW/h. The site also added two high-efficiency cooling towers to ensure all the equipment using cooling water can be operated at their optimal working condition. All motors with more than 45kW of power, were equipped with Variable Speed Driver and inductor to improve their power factor and to save energy.



Tongxiang site Variable Speed Driver on big motors to save energy

Waste heat recovery

In 2017, Tongxiang site also implemented a project of waste heat recovery. All steam condensate can now be recovered in a storage tank and reused wherever there is a need for hot water or heat. As a result, the estimated annual recovery of heat now is around 9 TJ.



Tongxiang site waste heat recovery

Energy saving project at Shunde site

A fixed-frequency cooling water pump (75kW) is used to distribute cooling water to all downstream users including chillers and production lines. There are fixed open valves for all users, while the demand of each user differentiates from each other and the demand fluctuates all the time. This setup results in the overloading for the pumps and low energy efficiency in running the system. Therefore, the site installed an Variable Speed Driver on the pump and replaced its traditional valves with new flow control valves. By implementing the project, the site realized annual electricity savings of 212,255kW/h.



Shunde Variable Speed Driver on pumps to save energy

Other emissions to air

Other emissions to air include Volatile Organic Compounds (VOC), NO_x and SO₂. In 2017, DSM China emitted a total of 980 tons of VOC, NO_x and SO₂. The amount increased from 864 tons in 2016 to 980 tons because of the integration of Taiwan sites this year. Measured per unit of product, DSM China has managed to reduce its emissions to air by 62% in 2017 through our efforts to improve the efficiency of air emission abatement facilities. The main contribution to this continuous improvement came from Laiwu site which installed activated carbon adsorption unit at the off-gas point on DCM absorption columns. Although we achieved the target set in our Responsible Care Plan 2015-2020, we still initiate more projects which, for example, install close systems to reduce non-organized emissions, or which will change the fuel type from fuel oil to natural gas to reduce the SO₂ emissions of the China sites in coming years.

Waste

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

One way of achieving this is the establishment of a circular economy. To this end, we aim to reduce the amount of waste produced at DSM and have set waste recycling targets. DSM already recycles as much as possible; landfilling is our last option. Our target is measured as the percentage of total waste recycled from the total waste created by normal operations or, if that is not possible, incinerated off-site with heat recovery. In 2017, 79% of DSM China's waste was either recycled or incinerated in this way. Increasing the recycling performance in 2017 posed a challenge, because in Taiwan, the incineration capacity was limited which forced DSM sites in Taiwan to select landfill for handling their waste. To compensate for this impact, more recycling opportunities need to be defined in 2018 to further increase the recycling rate. In 2017, the DSM China operation team initiated a working group to further reduce the waste amount produced on the sites and to better categorize the wastes. This group is aiming to develop best practices on waste handling to enhance the waste recycling performance in the whole Greater China Region.

Better classification of office waste at Kunshan site

In 2017, a series of activities were organized at Kunshan site for better classification of office waste. Through these activities, all the different office wastes were defined and differentiated by category such as plastics, papers, bottles and cans, batteries, etc. All the waste was then handled by experienced third parties based on their respective categories. The campaign resulted in a reduction of the total amount of waste going to landfills.



Kunshan site classification of office waste

Water and waste water

Water is essential for life. Managing our water utilization in a sustainable way is an important part of DSM's daily operations. In 2017, we received an A-rating from Carbon Disclosure Program, a non-profit global environmental disclosure platform for our water governance and water

management strategy. Our water program focuses on identifying and mitigating local water risks by conducting local water risk assessments for sites located in water stress areas, and other selected facilities. At the end of 2017, 100% of DSM China's applicable sites had a valid water risk assessment in place, the mitigation plans and actions will be defined in the year of 2018. In the coming period of 2018-2020, there will be a detailed follow-up on the execution of actions defined in the plans. To further 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 standard will be rolled out at several DSM China sites located in water-stressed areas.

Total water consumption by DSM China increased from 1.1 million m³ in 2016 to 1.3 million m³ in 2017, mainly due to the inclusion of water consumption numbers for Taiwan sites and one newly integrated DSM site in 2017.

Total Chemical Oxygen Demand (COD) emissions from DSM China sites increased from 26 tons in 2016 to 34 tons in 2017, mainly because of the inclusion of the data for Taiwan sites into China reporting. Several COD reduction projects were started in 2017 on a DSM Nutritional Products site in China, targeting an estimated further 20% COD reduction at the site.

PROFIT IN 2017



In 2017, DSM achieved a double-digit sales growth in Greater China. For its continuing operations, DSM's sales revenue in Greater China reached CNY 9,068 million in 2017, up 13% from CNY 8,031 million in 2016.

Governments around the world are increasingly focused on the environmental footprint of their domestic industries. In recent years, China stepped up enforcement of its existing environmental regulations, also known as the government's "Blue Skies" policy. This policy addresses air, soil and water pollution, and sets significantly higher standards for combating it. These include higher standards for the many small and medium-sized industrial manufacturers. DSM has been a very reliable player when it comes to environmental protection and sustainability. It has continually supported its customers throughout this era of uncertainty, while at the same time being a frontrunner in compliance.

In China, we continued to expand our core business with the growth of our premix solutions manufacturing. In Liaocheng, Shandong Province, we opened our sixth Chinese feed premix facility which will produce poultry and pig feed premix. China is the largest feed producer in the world, and one of the most dynamic markets for Animal Nutrition & Health. Over the last five years, this business unit grew by double digits in China.

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 inland growth of 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

New acquisitions and partnerships in China in 2017

In February, DSM acquired the technology and other assets of Suzhou Sunshine New Materials Technology Co., Ltd. (Sunshine)-the manufacturer of a novel, high-performance solar photovoltaic (PV) backsheets based on co-extrusion technology. Sunshine brings in innovative non-fluorinated backsheets products with a proprietary technology base.

In 2016, DSM had already entered into a commercial alliance with Sunshine. Through the acquisition, DSM will now expand

its product portfolio for the solar PV market to include polymer sheets that protect PV solar cells.

In April, DSM announced to sign a strategic partnership agreement with ET Solar, a differentiated global top-quality PV module provider with the aim to commercialize PV solar modules featuring unique sustainable and durable backsheets. Under the agreement, ET Solar will apply DSM's new high-durability backsheets to boost power gain in their high-efficiency modules. Furthermore, the two companies will collaborate in developing and testing new environmentally friendly backsheets that will help reduce the levelized cost of energy even further.

In November, DSM and Zhejiang Haixing Investment Co., Ltd. (Haixing), announced the acquisition of a majority equity stake in Inner Mongolia Rainbow Biotechnology Co., Ltd. The company has been renamed DSM Rainbow (Inner Mongolia) Biotechnology Co., Ltd. Through this acquisition, DSM and Haixing will be able to expand their global business of sustainable and innovative hydrocolloid solutions applied in food, beverage and personal care products to provide texture and stability. Moreover, the investment strengthens DSM's and Haixing's ability to serve their global and diverse customer base by meeting growing demand for gellan gum and widening their hydrocolloid product portfolio with the addition of Xanthan gum and Welan gum.

STAKEHOLDER ENGAGEMENT



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.

In the following pages, we present some examples from Greater China regions of how we engage with external stakeholders, including the partners in our value chain.



EMPLOYEES

Earth Day 2017

In 2017, our Earth Day theme was how every individual can contribute to achieve the Sustainable Development Goals. 21 sites in Greater China took part in Earth Day Celebrations, which were combined with the annual Family Day at DSM China Shanghai, Beijing, and Taiwan sites for the first time. The various activities at the 21 sites were also engaging local communities. For example, the Shunde site hosted activities with a local school, the Bazhou R&D center organized a sustainable flea market, and the Laiwu site organized basketball games with teams from the community around the site. Some sites such as Jiangshan and Xinghuo organized an “Ideas for Sustainable Operations Competition”, during which they collected more than 100 ideas. The Taiwan AGI site created a special Facebook group to invite employees and their families to join the Earth Day activities to increase sustainability awareness. The Pingtung and TYN sites in Taiwan both organized employees and families in a “Beach Cleaning”

campaign. The TYN site also signed an agreement with the local municipality to support it in keeping 1km of coastline clean for six months.



DSM Earth Day Celebration in offices and sites

DSM “Rainbow” Volunteers Team

Since 2015, DSM China has been running an employee volunteer team called “Rainbow Ambassadors”. Its volunteers have contributed time and efforts to support those poor children attending DSM Hope Schools who are in need for some extra help.

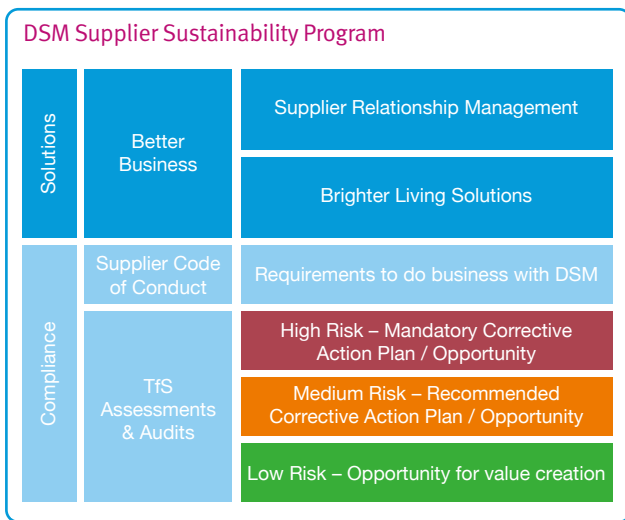
For example, the “Rainbow Ambassadors” visited DSM Hope schools in Sichuan and Gansu, and celebrated the Children’s Day on June 1st, 2017 together with local teachers and students. In order to enrich the campus culture and cultivate extracurricular interests, 11 DSM volunteers from various DSM business units designed and taught special courses to the students. Our employees also donated Hope Star Scholarships to 60 students, using to help them buy books and stationery.



DSM Rainbow Volunteer teams visited DSM Hope Schools in Sichuan and Gansu

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: “Resource scarcity / Circular & bio-based economy”, “Responsible business practices” and “Climate change & renewable energy”.



Suppliers 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.

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.

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.

Supplier Sustainability Program results

	2017			2016		
	Target	Achieved	Leverage TFS* pool	Target	Achieved	Leverage TFS* 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	-

* Total number of DSM suppliers assessed by TFS members.

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 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.

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).

Government

DSM China keeps close contact with China’s government to cooperate on sustainable development, and to promote a low-carbon economy as well as Corporate Social Responsibility in general.

Global CEO council

In June 2017, DSM CEO Feike Sijbesma joined the fifth summit of the Global CEO Council in Beijing, together with other international business leaders. The group discussed issues including globalization, market supervision, trade facilitation and innovation in capacity buildings at the meeting.



DSM CEO Feike Sijbesma joined the fifth summit of the Global CEO Council in Beijing

COLLABORATIVE PLATFORM AND NETWORKS

World Economic Forum (WEF)

DSM is a strategic partner of WEF and we attended their meetings throughout 2017, including the Annual Meeting in Davos. In China DSM is also represented at the WEF's regional meetings, like the Annual Meeting of the New Champions in Dalian that convenes the next generation of fast-growing enterprises and is one of the highest-profile global gatherings on science, technology and innovation.

In June 2017, DSM CEO Feike Sijbesma, CFO Geraldine Matchett, Managing Board Member Dimitri de Vreeze, DSM China President Weiming Jiang attended different sessions to contribute their opinions on Climate's Next Frontier, Global Trade and Inclusive Growth, The Circular Economy and Rethinking Economics. Our CEO Feike Sijbesma participated in a panel discussion about the Climate's Next Frontier. The climate-smart investment opportunity is estimated at nearly \$23 trillion in emerging markets between now and 2030. Following the US pull-out from the climate agreement, what leadership is needed to seize this opportunity.



DSM attended the Annual WEF meeting New Champion in Dalian

“Power of 5” project fights childhood malnutrition

Since 2016, DSM and the Amway Charity Foundation are cooperating to support the “Power of 5” project. This project helps children aged three to five years who live in poor areas of China. It gives them access to the necessary nutritional support in order to ensure their healthy growth during this critical

growing period. The project also promotes health education. As part of the project, a total of 6.35 million tablets of nutrition supplements have been provided to nearly 20,000 children by the end of 2017. These chewable tablets contain 17 nutritional substances including omega-3 fatty acid DHA as well as several different vitamins and minerals. DSM has contributed this innovative solution as an alternative for the traditional sachet form. The 2017 program data have indicated a 47% drop in the moderate anemia rate and a 67% drop in the number of underweight children. Moreover 90% of teachers have reported witnessing lower frequencies of childhood illness in their classes. Until 2020, the “Power of 5” project aims to benefit a total of 50,000 poor children in the age group between three and five years.



DSM - “Power of 5” project

DSM annual charity event - “Bright Experience”

DSM has played an important role in improving the nutritional value of food. As part of its engagement for better nutrition across the globe, the company regularly raises donations to fight hunger in developing countries. In order to increase attention to child hunger and malnutrition, DSM, together with the United Nations World Food Programme (WFP), has been running a global charity project called “Bright Experience” since 2007. As part of the cooperation, DSM supports WFP operations around the world through the addition of critical vitamins, minerals and other micronutrients to WFP's food basket.

A “Bright Experience” event has since become a signature annual charity activity for DSM China. In 2017, the event was held at 15 sites in 14 cities across China. The events attracted over 2,000 DSM employees and their family members, as well as people from the respective sites' business partners.

Through the “Bright Experience” project, DSM provides nutritious meals containing milk and eggs to children in poor areas of western China in 2017. Around two million people have thus far benefited from this program, among them 200,000 children.

“Today is a milestone day, as we witness how DSM has worked with WFP in the Bright Experience charity event for the last ten years. We are dedicated to raise awareness and funds in order to solve the hidden hunger problem. As one of the global leaders in nutrition and health, DSM always meets its commitment to fight malnutrition challenges through its nutrition improvement program.”

Dr. Weiming Jiang, DSM China President

“We appreciate the global and long term cooperative relationship with DSM, and will further strengthen the cooperation in order to realize the zero hunger till 2030.”

Ms. Caroline Legros, China Reoresentative, World Food Programme

“Till 2016, the School Feeding Project has benefitted over 650,000 children in China. We have also launched school meal projects in Cambodia, Nepal, Ghana, and other countries. We thank DSM for its active involvement in and commitment to the charity project. You have made a contribution to improve children nutrition in the underdeveloped areas.”

Ms. Huifang Wen, Director, China Foundation for Povetry Alleviation

DSM’s partnership with the China Nutrition Society

Since 2011, DSM has been partnering with the China Nutrition Society (CNS) in running the DSM-CNS Nutrition Research Foundation which promotes the development of nutritional science & technology in China. It aims to expedite progress in health food research and to improve the nutritional health status of various population groups. To this end, DSM provides financial support for related research projects in the Chinese academic community. Moreover, CNS is responsible for the daily operation of the fund.

In 2017, DSM selected 8 out of 44 submitted research proposals to be funded with a total of CNY 1.5 million. The research of the chosen projects focuses on middle-aged adults with high health risks and on pre-pregnant and pregnant women. They examine the effects of specific vitamins, carotenoids, and omega-3 fatty acids on the respective target groups and under certain circumstances. Their results may provide an important scientific basis for improving the nutritional status of specific population groups.








In total, the DSM-CNS Nutrition Research Foundation has funded 68 projects over the last seven years in various fields related to human nutrition, across different stages of life (pregnant women, infants, middle aged and elder adults). They researched on groups with various specific health conditions such as obesity, metabolic syndrome, dyslipidemia or dysphagia nutrition. As a result, project researchers have published a total of 63 scientific articles in peer-reviewed journals in either English or Chinese.



DSM employees and partners joined Bright Experiences event across China

EXTERNAL RECOGNITION

We are proud when our efforts are recognized by external world. Below you can find a selection of some awards and recognitions DSM received from NGOs, trade organizations, customers, suppliers and academia in 2017.

Organization	Recognition
	<p>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 chemical 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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
	<p>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.</p>

WHAT STILL WENT WRONG IN CHINA 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. The list 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, to take care of injuries and to act with compassion. We also trigger an improvement cycle. This includes investigating root causes and trying to eliminate them. We put new requirements or operating procedures in place as needed. For example, DSM Nutritional Products developed and introduced a new business group standard on internal transport – as a response to incidents with forklifts in 2017.

DSM applies zero tolerance to violations of the DSM Code of Business Conduct.

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 any injury, illness or damage but could have done so. Even when crisis is averted, it is our responsibility to learn and do better.

PEOPLE

The following incidents occurred at various sites in China in 2017.

Incidents involving falls

- One contractor fell off a scaffolding 1.8 meters high and injured his head. Surgery was needed to remove the congestion in his head.
- An operator slipped and fell on a material trolley while shoveling material and putting it into a grinder machine. He injured his thoracic vertebrae.
- One contractor fell down to the floor in the kitchen area and had to get two stitches on his arm to stop bleeding. An X-ray taken as a precaution showed that he incurred no bone fracture.

Incidents involving cuts and hand safety

- One employee cut his left thumb as he was using a self-made knife to cut the paper core of a membrane roll.
- An operator cut his left hand when preparing the dosage of a

- solid material. He used a safety knife to cut open a 20kg plastic bag. The cut resulted in a 3cm-long wound on his palm.
- One employee accidentally sealed her middle finger when using a sealing machine to seal packaging bags, resulting in finger injury.
- One employee was injured, after he encountered a vessel that was not properly covered, while its lid was lying on the ground. He tried to catch the cover frame and wanted to lift the cover to put it back on. However, the cover slipped from his left hand, which was scratched, including a slight bleeding.
- An employee injured a finger when working on the line 2 PET film, attempting to open a package of PET film.

Other safety incidents

- One operator in the outer packaging area was using a vacuum lifter to move some finished goods (material in carton boxes of 25kg) from the packaging line onto pallets. When the suction cup of the vacuum lift suddenly rebounded, it hit the forehead and eyebrow of the operator.
- During replacement of the water pipe section of a desulfurization tower (part of welding operations), high temperature material dropped to the demister padding, with smoldering caused by a fire in the desulfurization tower. Fortunately, no one was injured.

PLANET

- At the Xinghuo site, one of the production plants had to be halted for three months because of odour complaints from a nearby residential area. An off-gas treatment system is currently being installed in order to solve the problem. In the meantime, the plant is running at reduced capacity.
- In 2017, DSM China experienced several minor incidents that led to a Loss of Primary Containment (LOPC) from our installations. A total of five incidents occurred at several manufacturing sites. In all cases, an immediate cleanup prevented any possible impact to the environment. DSM is committed to continue reducing the number of these incidents. Compared to 11 cases in 2016, the five cases occurring in 2017 are a clear reduction, which is reflected in the number of Process Safety Incidents recorded.
- 300kg of white oil were discharged into the sewage pipe at one site, when an operator was draining water phase from a separation tank but forgot to close the drain valve in time.
- Around 25kg of material containing 64% methanol leaked from a hose connection when one employee was using compressed air to unblock the feed line of a centrifuge.
- A tank overflowed when an operator didn't fully close the hand valve to the mixer tank. As a consequence, the mixture liquid (about 10% PE and 90% white oil) flow out from the tank to the floor. About 200kg of the mixture liquid could be collected.

EXPLANATION OF SOME CONCEPTS AND RATIOS

PEOPLE

Frequency Index (FI)

Frequency Index is a way to measure for safety performance. The number of accidents of a particular category per 100 employees per year.

LWC-rate DSM own

The LWC-rate DSM own is the number of lost workday cases per 100 DSM employees in the past 12 months: $LWC\text{-rate} = 100 * (\text{number of LWCs (past 12 months)} / \text{average effective manpower (past 12 months)})$.

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: $REC\text{-rate} = 100 * (\text{number of RECs (past 12 months)} / \text{average effective manpower including contractor employees (past 12 months)})$.

SHE

Safety, Health and Environment.

United Nations Global Compact

A strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption.

PLANET

Biofuel

A fuel which is derived from renewable organic resources, as distinct from one which is derived from non-renewable resources such as oil and natural gas.

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.

Carbon footprint

The impact of a certain activity in terms of the emission of nonrenewable CO₂ to the atmosphere.

Circular economy

Circular economy refers to an economy that is restorative and in which materials flows are of two types, biological nutrients, designed to reenter 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 wastewater by organic substances.

Eco-efficiency

Eco-efficiency is a concept (created in 1992 by WBCSD) that refers to the creation of more goods and services while using less resources and creating less waste and pollution throughout their entire life cycle. DSM applies the concept to its ECO+ program. In the context of DSM's SHE targets, eco-efficiency relates specifically to the reduction of emissions and energy and water consumption, relative to the production volumes of DSM's plants.

Greenhouse-gas emissions (GHGE)

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.

LCA

Life Cycle Assessment (LCA) identifies the material, energy and waste flows associated with a product or process over its entire life cycle to determine environmental impacts and potential improvements; this full life cycle approach is also referred to as “Cradle to Grave”. It is also possible to assess a partial life cycle of a product or process with the most common type being “Cradle to Gate”, which assesses the environmental impacts of a manufacturing process without accounting for use phase or end of life impacts. There are many different environmental impact categories that can be assessed using LCA; at DSM the standard approach is to evaluate the carbon footprint and eco-footprint.

GRI

The Global Reporting Initiative (GRI) has developed Sustainability Reporting Guidelines that strive to increase the transparency and accountability of economic, environmental, and social performance. The GRI was established in 1997 in partnership with the United Nations’ Environment Programme. It is an international, multi-stakeholder and independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. These Guidelines are for voluntary use by organizations for reporting on the economic, environmental, and social dimensions of their activities, products, and services.

N

Nitrogen. A mostly inert gas constituting 78% of the earth’s atmosphere, nitrogen is present in all living organisms.

N₂O

Nitrous oxide. A gas that is formed during combustion. When emitted to the environment, it contributes to global warming.

NO_x

Nitrogen oxides. These gases are released mainly during combustion and cause acidification.

Renewable resources

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 cause acidification.

VOC

Volatile organic compounds. The term covers a wide range of chemical compounds, such as organic solvents, some of which can be harmful.

PROFIT

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

EBITDA is the sum total of operating profit plus depreciation and amortization.

Return on capital employed (ROCE)

Operating profit as a percentage of weighted average capital employed.

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