



DSM China Integrated Annual Report 2014

HEALTH • NUTRITION • MATERIALS



DSM

BRIGHT SCIENCE. BRIGHTER LIVING.

Life Sciences and Materials Sciences

DSM, the Life Sciences and Materials Sciences company

Our purpose is to create brighter lives for people today and generations to come. We connect our unique competences in Life Sciences and Materials Sciences to create solutions that nourish, protect and improve performance.

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

DSM believes that its continued success will be driven by its ability to create shared value for all stakeholders, now and in the future. It creates sustainable shared value by innovating in ways that allow its customers to provide better People, Planet and Profit solutions – solutions to the challenges facing society, the environment and end-users. In this way, DSM's customers derive value from being able to offer end-users improved products; 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, DSM's 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 global science-based company active in health, nutrition and materials. By connecting its unique competences in Life Sciences and Materials Sciences DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders simultaneously. DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, pharmaceuticals, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM has around 21,000 employees and delivers annual net sales of more than €9 billion. The company is listed on Euronext Amsterdam. More information can be found at www.dsm.com.

DSM at a glance

Highlights of the year

In 2014 the 21,351 employees of DSM have worked hard to create brighter lives for people today and generations to come. Here are some of the highlights of the year.

Life Sciences

DSM Nutritional Products is one of the world's leading suppliers of essential nutrients such as vitamins, carotenoids, nutritional lipids and other ingredients to the feed, food, pharmaceutical and personal care industries. Among its customers are the world's largest food and beverage companies. DSM is uniquely positioned thanks to the combination of its broad portfolio of active ingredients; maximum differentiation through formulation; local presence; a global premix network; and a strong focus on innovation. DSM Nutritional Products consists of the following business units:

- **Animal Nutrition & Health** addresses the nutritional additives segment of the global feed ingredients market. DSM is active in vitamins, feed enzymes, carotenoids, minerals and eubiotics.

- **Human Nutrition & Health** primarily addresses the nutritional ingredients markets, but is also active in coloration and preservation in the global food ingredients market.
- **Personal Care** focuses on the active and performance ingredients such as vitamins, UV-filters and bio-actives for the skin care, sun care and hair care market segments.

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



Materials Sciences

The **Performance Materials** cluster consists of DSM Engineering Plastics, DSM Dyneema and DSM Resins & Functional Materials. These business groups are active in technologically sophisticated high-quality products and offer specialized value propositions.

- **DSM Engineering Plastics** is a global player in developing, manufacturing and marketing specialty plastics used in components for the electrical and electronics, automotive, flexible food packaging and consumer goods industries.
- **DSM Dyneema** is the inventor, manufacturer and marketer of Dyneema®, the world's strongest fiber™. This product, based on ultra high molecular weight polyethylene is produced by means of DSM's proprietary

processes. The Dyneema® brand enjoys very high recognition in the value chains served.

- **DSM Resins & Functional Materials** is a global player in developing, manufacturing and marketing high-quality resins solutions for paints and coatings, composites and fiber-optic coatings. DSM Resins & Functional Materials generates value with and for its global customer base through continuous innovation so that they meet regulatory needs and respond better to consumer demands for more sustainable materials.

The **Polymer Intermediates** cluster comprises DSM Fibre Intermediates, the global market and technology leader in caprolactam and the leading acrylonitrile supplier in Europe.



Innovation Center

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

DSM's **Emerging Business Areas** provide strong long term growth platforms based on the company's core competences in Life Sciences and Materials Sciences. The company has three Emerging Business Areas:

- DSM Biomedical
- DSM Bio-based Products & Services
- DSM Advanced Surfaces (solar materials)



Pharma Partnerships

DPx Holdings (DPx) is a global leader in contract development and manufacturing services with customers across the pharmaceutical industry, sales of around USD 2 billion and more than 8,000 employees spread over 24 locations across North America, Europe, Latin America and Australia.

DSM Sinochem Pharmaceuticals (DSP) is the global market leader in beta-lactam active pharmaceutical ingredients (APIs) such as semi-synthetic penicillins (SSPs) and semi-synthetic cephalosporins (SSCs), which represent the biggest class of APIs in anti-infectives. It is also a leader in other active ingredients such as nystatin and next generation statins. DSP, 50 percent owned by DSM, manufactures nearly all its beta-lactam APIs and the related intermediates using proprietary biotechnology.



Key data for DSM 2014

Net sales, total DSM (x million)	Operating profit plus depreciation and amortization, total DSM¹ (x million)	Net profit, total DSM (x million)	Capital expenditure (cash based), total DSM (x million)
€9,283	€1,166	€145	€628
Cash provided by operating activities, total DSM (x million)	Core earnings per ordinary share, continuing operations²	Dividend per ordinary share³	ROCE, continuing operations (in %)
€808	€2.85	€1.65	7.8
Workforce (at year-end)	Number of nationalities (at year-end)	Employee engagement - favorable score (in %)	Frequency Index of recordable injuries (per 100 DSM employees and contractor employees)
21,351	89	70	0.47
Greenhouse-gas emissions, total DSM (x million tons)	Energy use, total DSM (in petajoules)	Water use, total DSM (in million m ³)	ECO+ solutions as % of running business, total DSM
4.2	39	118	49
ECO+ solutions as % of innovation pipeline, total DSM	Innovation sales as % of total sales	China sales, continuing operations (x USD million)	Sales to High Growth Economies as % of total sales
95	18	1,956	43

¹ Before exceptional items

² Before exceptional items and excluding amortization of intangible assets related to purchase accounting

³ Subject to approval by the Annual General Meeting of Shareholders

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Letter from the Chairman

Dear reader,

The year 2014 was characterized by volatile macro-economic developments. European economies barely grew and continued to struggle with their competitiveness. Growth slowed down in several emerging or high growth economies. The US showed remarkable resilience and growth, thanks in part to its competitive energy position. Adding to the uncertainty were lower oil prices in the second half of the year, volatility in some of the world's most important currencies and increasing geopolitical tensions. On top of these challenges, our world continued to face unprecedented environmental and social pressures. It is clear that the tried and tested formulas of yesterday must make way for newer and more sustainable solutions as a matter of urgency.

In this context, DSM stands significantly transformed and uniquely positioned to demonstrate resilience through the portfolio we have developed over the years. We are able to benefit from the contributions our company makes to help address the challenges unfolding around us, including climate change and access to nutrition. That is not to say that DSM is immune to the repercussions of economic volatility in the short term, as our results of 2014 show.

In the long term, the megatrends that drive our business are more significant than ever before. They are: Global Shifts, which account for the large-scale demographic changes such as population growth, urbanization and increased wealth of the middle class in high growth economies; Climate and Energy, which refers to the rising pressures on our planet, the scarcity of resources and the need for alternative energy sources; and Health and Wellness, which points to dietary and nutritional concerns and opportunities, as well as the effects that rapidly aging populations with greater healthcare and dietary needs are having on our end-markets.

The reported year 2014 was the fourth year of our DSM in motion: driving focused growth strategy that has transformed our company since 2010. Where necessary, we have sought to sharpen and refine this roadmap to meet the needs of changing global circumstances. As we enter the fifth year of implementation, we will continue to create sustainable value by making progress against the growth drivers of High Growth Economies, Innovation, Sustainability, and Acquisitions & Partnerships.

In 2014 we achieved more than € 9 billion sales and an EBITDA of nearly € 1.2 billion. This is a decrease in EBITDA compared to 2013 of seven percent. This decline was driven by a negative currency effect and tough market conditions in Nutrition and caprolactam. The organic growth in 2014 was three percent.

Our current strategy of focusing on high growth economies has continued to pay off with approximately 43 percent of our sales coming from these countries in 2014. Although growth in

several of these countries slowed down in the year, it is clear that their expanding populations and growing urban middle classes will continue to drive growth in the long term.

At DSM, we are well positioned to capture that growth and we have continued to expand our reach in these countries, not only in sales but also in terms of our own organization and members of our top management. Interestingly, some of the world's strongest economic growth in 2014 was seen in the US, DSM's largest market, where we have expanded significantly in recent years, amongst others through acquisitions and partnerships.

Our focus on innovation resulted in almost 18 percent of our sales in 2014 coming from newly introduced, higher margin products. In addition, we made steady progress in the development of our three Emerging Business Areas: Biomedical, Bio-based Products & Services and Advanced Surfaces.

Biomedical now delivers around € 140 million in sales and strong EBITDA margins, with highly innovative products in the fast-growing global medical devices market. These include biomedical materials, technologies and capabilities in orthopedics, sports medicine, ophthalmology, general surgery and cardiology.

In Bio-based Products & Services, which includes clean energy from corn crop residue, and bio-chemicals (such as bio-succinic acid), we are proud to have opened the first second-generation cellulosic bio-ethanol factory in North America, located in Emmetsburg (Iowa, USA), with our partner POET. Also in other parts in the world, including Brazil, we are looking at opportunities. Our revolutionary technology produces a fuel made from corn crop residues, which has 85-95 percent lower CO₂ emissions than conventional gasoline measured over the value chain, and promises to further reduce North America's reliance on fossil fuels. The plant's grand opening took place in September, and was attended by Willem-Alexander, King of the Netherlands, and the US Secretaries of Agriculture and Energy as well as the Governor of Iowa, among other dignitaries.

In Advanced Surfaces, our anti-reflective coating KhepriCoat[®] is making inroads into the solar market, while we are also a first mover in 'light trapping' film technology, both of which enhance the yield of solar panels. We believe that these new businesses have the potential to create substantial value.

Sustainability, a key value and area of responsibility for the company, has become a strong business driver. ECO+ solutions, which offer our customers more value with less environmental impact than mainstream alternatives, now account for close to 50 percent of our sales and 95 percent of our innovation pipeline. We are applying a similar approach with People+, where we are at the forefront of developing a new methodology to measure the impact of a product on

people's lives throughout its entire life-cycle. Today, our ECO+ sales are growing faster than non-ECO+ sales and with higher margins, demonstrating the good growth opportunities that sustainable innovations can offer our company.

DSM has an active approach to portfolio management with the aim of reducing volatility and cyclicalities and focusing on higher margin businesses. In the second half of 2014, we stated our intention to pursue strategic actions for our caprolactam, acrylonitrile and composite resins businesses, which will enable us to further sharpen our company's focus. Combined, these businesses account for more than 20 percent of DSM's sales, but represent a substantially lower proportion of our profit.

Next to pursuing these strategic actions, we are fully focused on integrating and reaping the synergies of the value-contributing acquisitions we have made in recent years, while refraining from large acquisitions for the moment. Since 2010, we have allocated more than € 2.8 billion to acquisitions, primarily in Nutrition in high growth economies and in North America.

In Nutrition, the underlying fundamentals remain strong. In the long term, the business is driven by population growth, urbanization, rising standards of living and the desire for health and convenience by an increasingly aging population. Notwithstanding these drivers, we were confronted with several headwinds in the year. These included a sluggish Western food and beverage market, decreases in the US market for dietary supplements containing our ingredients, continued price pressures in vitamin E, which is mainly used in our animal nutrition business, and the negative impact of a strong euro for a large part of the year compared to other currencies.

We have developed specific responses to these headwinds, which we have communicated to the market. We remain focused on operational improvements and working capital reductions. These actions should enable us to grow our business, also by protecting and gaining market share in our nutrition business, as we have done in recent years, while generating quality earnings. In 2014, organic growth for the cluster was 2 percent and the EBITDA margin was just below 20 percent.

In Nutrition we are well positioned for the medium and long term, with an expanded presence across the value chain, operating globally with a broad portfolio of products across diverse end-markets, driven by strong structural growth drivers.

Our Performance Materials business is continuing to upgrade its product portfolio towards more sustainable and higher-margin products and solutions. Despite currency weaknesses and volatility across a number of sectors, the business saw gradual margin improvements and found new opportunities

to leverage its operations and assets. This resulted in 2014 in an organic growth for the cluster of 2 percent and the EBITDA margin was just above 12 percent.

Our joint venture with Sinochem, DSM Sinochem Pharmaceuticals (DSP), was deconsolidated following new accounting rules for joint ventures. DSP improved its performance thanks to solid organic growth. We also formed DPx in partnership with JLL, combining DSM Pharmaceutical Products and Patheon into a leading pharma services company. DSM owns 49 percent of this joint venture. We are pleased to report that the integration of DPx progressed well and we expect the strong value generation of the company to continue next year.



To support the integration of our acquisitions we have continued to implement the ONE DSM Culture Agenda in conjunction with our Leadership Model. This will support our ability to align with the world around us, while creating a common language and a stronger performance culture across our organization. We introduced the initiative in late 2012 and have since rolled it out across the company, finding different ways of applying its themes in our everyday work.

We held our seventh worldwide Employee Engagement Survey in the year, with over 85 percent of our employees and contractors completing the questionnaire, which is considered an excellent response rate. The Employee Engagement Index, at 70 percent, is high and comparable to previous years. We will move this survey into a two-year cycle in order to have more time to follow up on actions, with the next full survey in 2016.

In Safety and Health, we regret that we cannot report an improvement. The Frequency Index of Recordable Injuries increased to 0.47, compared to 0.38 in 2013. This is due

in part to the shift in our portfolio, which has seen newly acquired units phased in and more mature units phased out. Safety and Health is of primary importance to us, so we work very hard to bring newer units up to our standard in the months and years ahead, coming closer to our goal of having an injury and incident-free working environment.

We continued to make good progress towards our Inclusion & Diversity goals by addressing the geographical distribution of management and other key functions, looking to achieve a representative balance of DSM's leadership group in gender and nationality. The number of women in executive positions increased from 11 percent to 12 percent in 2014, and we also saw further growth in non-European executives. A number of senior appointments in 2014 significantly improved our diversity ratio in top management, which included our first female board member/CFO.

Regarding the reduction in greenhouse-gas emissions and improvement in energy efficiencies, we are pleased to report that we remain on track to achieve our long-term goals. We are very proud that in 2014 we were once again named among the leaders in the Dow Jones Sustainability World Index. We are also proud that we have continued to receive a great deal of external recognition, including awards, for our achievements in our integrated sustainability approach. Our integrated reporting, which is based on the guidelines of the Global Reporting Initiative, also developed in the year with the implementation of G4, the fourth generation of sustainability reporting guidelines. We remain committed to aligning our strategy and operations with the principles of the United Nations Global Compact.

We are already taking steps to address the challenging external environment. Our key short-term priority is to take strategic actions regarding non-core businesses and to continue to focus on operational performance of our Nutrition and Performance Materials businesses. This will be complemented by accelerated actions to improve efficiency and reduce costs, specifically in Nutrition and across all functions of the company, including ICT, HR, Finance and Purchasing. In 2015 we will update our company strategy. Among other things we will address our steering of our businesses, functions and regions, and we will define new long-term targets for our core businesses.

In March, we announced the retirement of Rolf-Dieter Schwalb as CFO and member of the Managing Board, who stepped down in December but has remained involved with DSM until the completion of this report. I would like to take this

opportunity to thank him for his significant contribution to DSM and his role in the transformation of our company over several years. I am very pleased that Geraldine Matchett has joined us as a member of the Managing Board per 1 August 2014 and as our CFO per 1 December 2014. During her short time with the company, she has already demonstrated her value for DSM.

It is a tribute to the enormous efforts – not only of our employees, but of the many people we cooperate with, including shareholders, customers, suppliers, civil society at large and local communities specifically – that we have so many reasons to be confident about our future. It is to all of them who have contributed to DSM's success that we extend our most sincere thanks and appreciation and with whom we look forward to working in the years ahead.

Today we can proudly say that DSM has become a truly global organization, with significant operations in most regions where there are growth opportunities. We are using innovation to develop a younger and more sustainable product portfolio, while unlocking the potential of new platforms that will drive growth and margins in the years ahead. Our emphasis remains on driving performance through operational improvements and ongoing portfolio management for shareholder value creation. Our ability to leverage unique opportunities in our businesses for the benefit of People, Planet and Profit, enables us to deliver on our mission of creating brighter lives for people today and for generations to come.



Feike Sijbesma
CEO/Chairman of the Managing Board
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Letter from DSM China President



Dr. Jiang Weiming
DSM China President, Corporate Senior Executive Vice President

Dear readers,

The global economic outlook remains uncertain, and the economic growth in China has also slowed down with this “new normal” pace of expansion. China is heading in the right direction by balancing the quality of growth better. The Chinese government is encouraging market-driven growth with a strong focus on innovation and sustainability, which will lead to a higher “green GDP”. This focus on innovation and sustainability matches DSM’s ambitions, and are also two of DSM’s strategic business growth drivers.

DSM in China made good business development in 2014, with sales achieving double-digit growth, especially for the local application businesses.

Both the Life Sciences and Materials Sciences clusters focused on local business development in 2014. Our Nutrition business continued to develop in a positive trend. The acquisition of Aland will allow DSM to further strengthen its position in vitamin C. Moreover, the opening of the China Animal Nutrition Center in Bazhou in May is expected to support the development of tailored solutions to meet the needs of the fast growing poultry and swine markets in China.

The Materials Sciences businesses did well despite the unfavorable conditions. DSM Engineering Plastics (DEP) China saw solid growth in 2014, with the “local for local” strategy being well implemented. DEP has also developed high potential market applications not only for global OEMs, but also for Chinese local brands, which has set a solid foundation for even faster growth in 2015. Shandong ICD High Performance Fibres Co. Ltd. (ICD) achieved remarkable business growth in 2014. Using its Trevo® high-strength fiber in super-large aquaculture cage nets provided innovative solutions for the off-shore farming industry to operate in a more sustainable way.

We have taken major steps in developing the Emerging Business Areas in China. For the solar industry, we partnered with leading solar module companies to boost innovative products and services.

Safety is always our top priority. In China, the Frequency Index of Total Recordable Injuries reached 0.17 in 2014, taking a leading role among DSM’s global regions.

Building on the successful roll-out of the ONE DSM Culture Agenda in 2012 and 2013, we have made more local efforts in 2014 to further develop into a high performance organization, including the “go-to-site” Culture Roadshows in Nanjing, Guangzhou and Beijing. We also launched the 2014 ONE DSM Culture Agenda China Award to recognize those significant individuals or teams who demonstrated the culture behaviors, role-modeled the others and generated the visible impacts and values to DSM.

China is one of the most important markets for DSM and we will focus on delivering innovative products and services in the areas of food, feed, nutrition, new materials and new energy. We will further optimize our operations with a strong focus on environmental and social responsibility and accelerate our connections in the market to deliver the right products with speed.

The basis for our long-term success in China is the great trust and support from both our employees and all of our external stakeholders. With this report, the eighth of its kind in China, we have reported on a regular basis our performance and progress on the dimensions of People, Planet and Profit in a transparent manner. On behalf of the DSM China Leadership Team, I would like to extend our sincerest gratitude to all of our stakeholders and we are looking forward to working with you even closer to create shared value and contribute to a more sustainable world.

Dr. Jiang Weiming
DSM China President

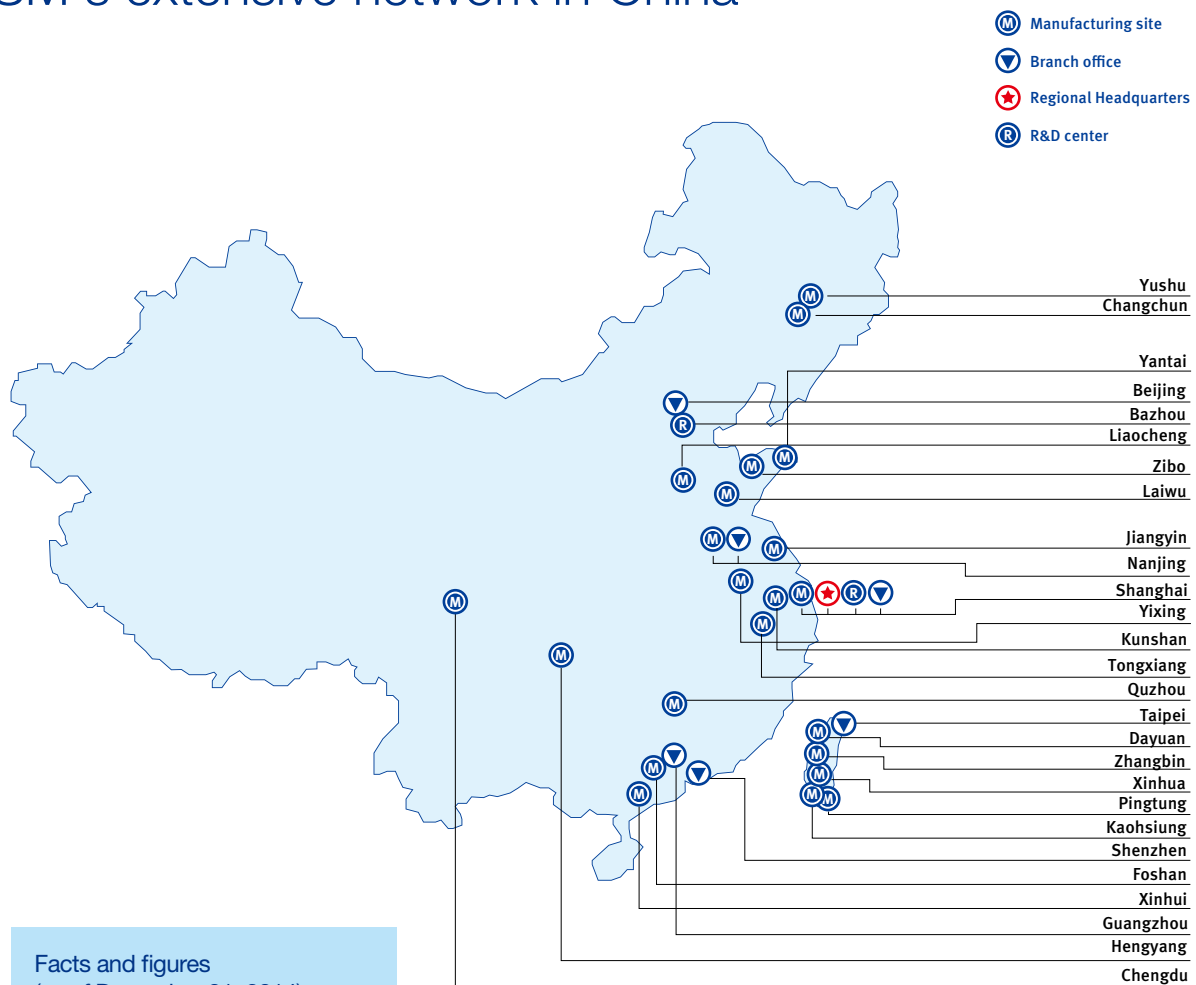
DSM in China overview

DSM activities in China

DSM is active across almost its entire portfolio of Life Sciences and Materials Sciences in China, serving 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 the early 1990's. The company currently has 45 affiliates in China including 27 manufacturing sites and employs about 3,500 people. The DSM China headquarters and the China Science and Technology Center is located in Shanghai. DSM's business is growing healthily and steadily in China with a revenue of USD 2 billion in 2014.

DSM's extensive network in China



Facts and figures (as of December 31, 2014)

- 45 affiliates
- 27 manufacturing sites
- 9 branch offices

Sales 2014	Employees
US\$2 billion	3,500

History - DSM grows with China

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 also collaborates with Fudan University on their Joint Laboratory.

In the Beijing 2008 Olympics, DSM stepped up its efforts in the fields of sports and innovation even further, contributing to sporting success. DSM publishes its first China sustainability report.

DSM opens office in Chongqing to expand its presence to western China.

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



1963

1993

1995

2005

2007

2008



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



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

DSM establishes Representative Office in Beijing.



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.



DSM breaks ground for the animal nutrition center in Bazhou, Hebei Province, enhancing its animal nutrition competence in China.

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



DSM launches a food specialties world-class enzyme facility in Jiangsu to serve both the local and global markets.

DSM opens a new animal nutrition center to support the Chinese livestock production industry.

DSM also announced its intention to acquire Aland (HK) Holding Limited, a Hong Kong-based company producing vitamin C in China, which will allow DSM to further strengthen its position in vitamin C.

The company also opens a state-of-the-art second production line in DSM Nanjing Chemical Company that saves considerable amounts of energy and discharges fewer emissions.



2009

2010

2011

2012

2013

2014



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



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



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 as part of a series of corporate social responsibility activities.



Innovation in China

From building the machine to doubling the output

At DSM, innovation turns 'Bright Science' into 'Brighter Living'. It goes beyond having great ideas, state-of-the-art technology and high-tech laboratories. It is about discovering and integrating the best, the most sustainable, and commercially viable solutions that meet market needs and create profitable growth and future value.

DSM's target is that by 2015 innovative products and solutions will account for 20 percent of its total sales. Innovation sales are defined as sales of products and applications that have been introduced over the last five years. The company is well on track to deliver on its target as these products accounted for 18 percent of total sales in 2014. They have strongly contributed to DSM's sales and EBITDA growth with margins higher than the average of its running business. In Nutrition, innovation sales accounted for 17 percent of the total, while in Performance Materials they accounted for 24 percent.

DSM works to foster its innovative practices on an ongoing basis. It does this throughout its established businesses in Nutrition and Performance Materials. At the same time, the Innovation Center, with its Emerging Business Areas, is focusing on developing new growth platforms outside of the current scope of the company's business groups.

In order to develop tailor-made and "local for local" solutions, DSM is continually building up its research capacity in China. Teams of researchers work on DSM's innovation projects at its R&D centers in Shanghai and Bazhou. DSM also fosters research collaboration with a number of universities across China.

Local for local solutions

DSM's Performance Materials Research Center (PMRC) plays a key role in "local for local" R&D projects in Engineering Plastics. For example, during the new product development for application in Xiaomi Mi4 smartphone, DSM R&D team managed to create twelve different formulations for the plastic frame splitter within ten days. The team's high-level knowledge and efficient technical support in partnership with local business team were highly appreciated by Xiaomi. Xiaomi selected Stanyl ForTii XS85 as the most suitable material for this core function. DSM's ability to closely cooperate on the ground with the local customer helped to significantly shorten the path from development to commercialization. This is essential for Xiaomi, a dynamic fast-growing customer.

Another example is a new engineering plastics product, developed by PMRC researchers, which is introduced into Lithium-ion batteries for improving thermal stability and life time. PMRC researchers' crucial battery knowledge and close collaboration with local partners significantly contributed to shorten the time-to-market of this high-value-added product.



Xiaomi's Mi4 smartphone

The frame splitter receives the signals and transmits them into the phone's core. The formulation needs to meet stringent performance requirements for the frame splitter to function properly.

New World-class Animal Nutrition Center in China

In May 2014, DSM Nutritional Products opened its new China Animal Nutrition Center with a laboratory, an experimental animal feed mill, swine and poultry houses, and an integrated manure treatment plant. Located in Bazhou, Hebei Province, the site operates according to international standards and animal welfare guidelines. The center will work on developing feed additive products tailor-made to suit the needs of the local animal husbandry industries. The center also has the infrastructure for customer visits and events, as well as scientific seminars.



Animal Nutrition Center in Bazhou

New Resins R&D and Technical Service Center in Nanjing

In 2014, DSM launched a new Resins R&D and Technical Service Center in Nanjing. The center's R&D team, consisting of over 20 professional researchers, collaborates with DSM R&D centers worldwide, as well as local and international universities and research institutions to innovate and improve resin performance both in functionality and environmental footprint. The center works to create tailor-made solutions for local market needs, and provides customized technical service to local customers.



Opening ceremony of new resins R&D and technical service center in Nanjing

Collaboration

DSM China is also active in broader public-private partnerships that help increase its scientific scope. During 2014, PMRC continued to strengthen collaboration with key

universities and research institutions in China through various programs and events.

In June, a PMRC team attended the 11th International Symposium on Polymer Physics in Nanjing. The symposium was co-organized by the Chinese Academy of Sciences and several institutions from the United States, Germany and Japan. The PMRC team contributed four presentations to introduce DSM and to showcase DSM's material science research. For example, the team has been researching on the fuel barrier property of DSM materials, which is conducted in order to minimize fuel leakage from engine tanks into the environment. DSM also sponsored a Poster Prize for the best 15 research projects presented by attending students.



Dr. Huang Yibin, R&D Director of PMRC handing out the prizes to the poster winners on behalf of DSM

In October, PMRC hosted the 3rd DSM Shanghai Symposium on Material Science at the DSM campus in Shanghai. Leading professors from the region and their PhD students showcased their leading-edge research in various material science fields. For example, the keynote speech given by Professor Stephen Cheng highlighted his innovation of combining polymer chemistry, physics and bioscience to design new-generation materials. DSM scientists also presented lectures and posters to showcase DSM's in-house research capabilities to provide innovative solutions to industrial problems.

DSM Science & Technology Award Asia 2014

As part of its commitment to promoting pioneering research that leads to products or solutions to which enhance people's quality of life, DSM has launched its Bright Science Awards program. The program recognizes the achievements of DSM scientists as well as researchers working outside the company who have demonstrated excellence in innovative research. The program is an integral part of the company's open innovation approach. As part of this program, the DSM Science & Technology Awards recognize outstanding, innovative PhD research in various regions around the world.

In October, the Science & Technology Award Asia 2014 was presented in collaboration with the Animal Nutrition Branch of the Chinese Association of Animal Science and Veterinary Medicine during the 7th China Academic Symposium of Feed Nutrition in Zhengzhou, Henan Province. The award was given to Dr.

Dong Na from Northeast Agriculture University in Harbin. The international jury chose Dr. Dong Na from among four finalists to reward her excellent research in the field of molecular design on short peptides with exceptional antimicrobial properties, which opens up potential to replace antibiotics used as therapeutics to improve gut health and to counteract infectious diseases of various origins in farm animals.



Dr. Dong Na together with Marcel Wubbolts (CTO of DSM) and Gilbert Weber (DSM Corporate Scientist for Animal Nutrition & Health) after receiving the Award

Patents

Every year, DSM files more than 100 patent applications in China. In 2014, twelve of these patent applications were for innovations created locally by DSM China Employees. Over the last 5 years, the company has focused on increasing the number of patent applications resulting from local innovations. The remaining applications are for global DSM inventions brought to China which require local patent protection.

DSM IP China Awards

Since 2012, DSM China recognizes employees when they receive patents for their innovations or when the resulting products are commercialized in China. In 2014, Zhu Hongjun, Wang Xiaoliang and Gao Rui from DSM Advanced Surfaces received an award for a utility patent granted for an exhaust system they had developed for a glass coating machine. Liu Yongle and Zheng Degang from DSM Dyneema received an award for a successfully commercialized ballistic helmet which has also been granted a utility patent.



Zhu Hongjun, Wang Xiaoliang and Gao Rui from DSM Advanced Surfaces received an award for a utility patent

Bright sciences into brighter living

I Business cases

HEALTHIER DIET AND LIFESTYLE WITH PECTIN

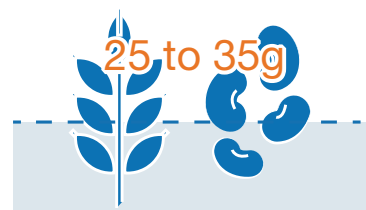


Many diseases and health issues in the modern world are caused by unbalanced eating habits but can be mitigated by a healthy diet.

A high fiber diet is beneficial to different health aspects in terms of:

- weight control
- gastrointestinal health
- cardiovascular health

DAILY RECOMMENDED FIBRE INTAKE:



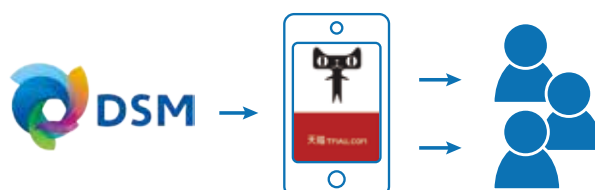
But the average fiber intake in China is less than half of that.

DSM Hydrocolloids developed a product range based on pectin.

PECTIN: type of dietary fiber found in cell walls of plants extracted from citrus fruits and apple peels

can serve as a functional food ingredient for some dairy products, beverages or gummy candies.

In China, DSM Hydrocolloids has also developed a line of consumer products it sells directly to end consumers online through the Taobao TMall and WeChat shop channels under the ENVESH™ brand.



Recently it released a series of weight management products, called “ENVESH™ Slim”. With these products, DSM aims to raise public awareness in China of the need to increase fiber intake and to improve people’s diets.

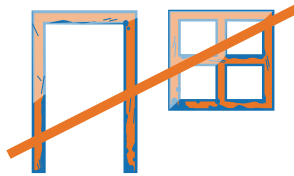
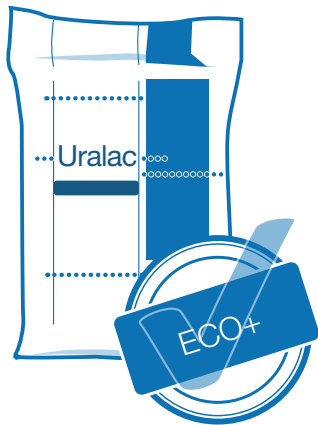
ENVIRONMENTALLY FRIENDLY SURFACE PROTECTION



Buildings and its components, such as doors or window frames, need to withstand prolonged exposure to temperature variations, sunlight, rain and dew.

Colour change, loss of strength, cracking, peeling, chalking or oxidation of metal door and window frames causes huge damage to many buildings every year.

DSM's Uralac® superdurable coating resins



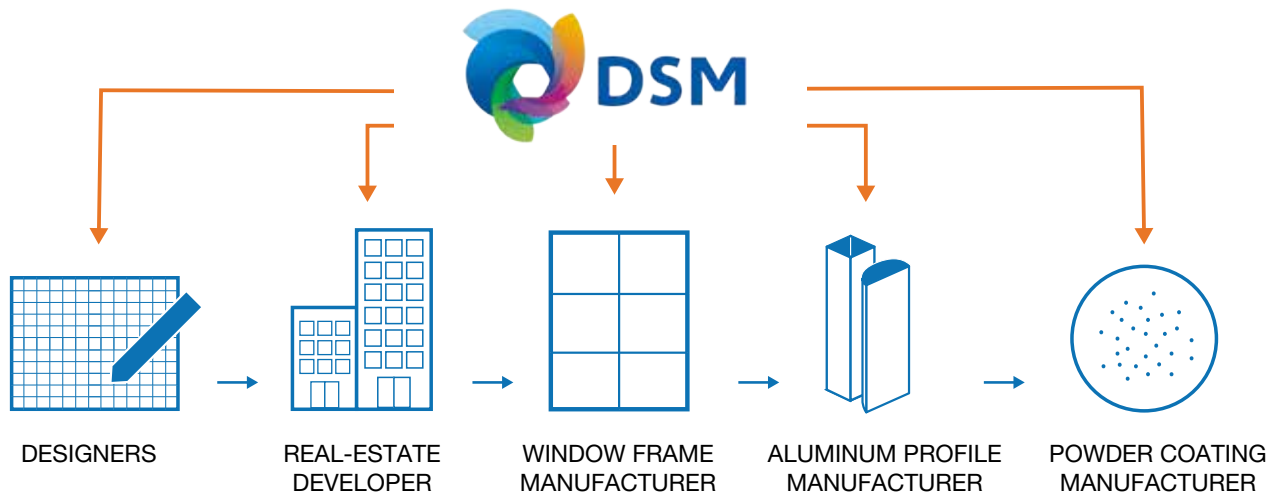
Prevents & protects
Frames from fading, scratches, and corrosion



Saves resources
Only very small amounts of powder coatings needed



Reduces footprint
by 50-70% compared to liquid solvent-based coating



Through cooperation with China's large coating suppliers, large window frame manufacturers and architectural designers, DSM's Powder Coating Resin brand has been approved by many stakeholders in the architectural value chain.

Sustainability

From responsibility to a strong business driver

At the heart of DSM's mission is the core value of sustainability and a commitment to helping to create a more sustainable world. As part of its 2010-2015 strategy DSM in motion: driving focused growth, the company has taken sustainability to the next level. In addition to fulfilling its responsibilities toward society, it has successfully developed sustainability as a strategic growth driver. For DSM, achieving sustainability means pursuing activities that create value in the areas of People, Planet and Profit. These must meet the needs of the present generation, without compromising the ability of future generations to meet their own needs.

Sustainability is a key differentiator and a driver of value in DSM's markets. The company is uniquely positioned to create and capture the many opportunities that these challenges present across its value chains. It is therefore vital that sustainability guides the activities of DSM's global business groups, as well as its operations, strategic actions and decisions. By continuously developing innovative science-based products and solutions that contribute to a brighter future for people everywhere, DSM is also creating a more sustainable and profitable future for itself.

ECO+

ECO+ is DSM's program for the development of sustainable, innovative products and solutions with ecological benefits. Products qualify as ECO+ when their environmental impact is lower than competing mainstream products that fulfill the same function. When considered over their entire life cycle, ECO+ solutions offer superior performance with a lower eco-footprint. The ecological benefits can be created at any stage of the product life cycle, from the raw materials through to manufacturing and potential re-use and end-of-life disposal. DSM uses comparative Life Cycle Assessments (LCAs) and/or expert opinions to determine whether a solution should be considered ECO+.

Since the start of its ECO+ program, DSM has looked to harmonize performance metrics in its industries. To this end, the company has chaired the work of the World Business Council for Sustainable Development (WBCSD) in its initiative for the chemicals sector in the area of product life cycle metrics. In 2014, in collaboration with nine industry peers, DSM published a key guidance for the consistent application of environmental LCAs. This guidance is an important step for all participants in the value chain and provides clear benefits to consumers.

ECO+ solutions can be found across all of DSM's business groups with many more under development. They now

Sustainability aspirations 2011-2015	Realization 2014
Dow Jones Sustainability Index	
Top ranking (RobecoSAM Gold Class)	Gold Class ¹
ECO+ (innovation)	
At least 80% of pipeline is ECO+	95%
ECO+ (running business)	
From approximately 34% towards 50%	49%
Energy efficiency	
20% improvement in 2020, compared to 2008	17%
Greenhouse-gas emissions	
25% reduction (absolute) by 2020, compared to 2008	2% reduction ²
Employee Engagement Survey	
Towards High Performance Norm ³	70% favorable
Diversity	
Women in executive positions	12%
BRIC+ nationals in executive positions	12%
People+	
DSM People LCA	On track

¹ DSM returned to Silver Class for 2015

² Total reduction: in the calculation that accounts for changes in production volume, DSM's GHG emissions decreased by 16% in 2014 compared to 2008.

³ The High Performance Norm (over 70% favorable) is the composite of the top 25% employee responses of the selected external benchmark organizations.

account for 49 percent of total sales. With an average annual growth rate of around ten percent, ECO+ sales are on track to achieve DSM's target of towards 50 percent of the running business by 2015. Across DSM's Life Sciences and Materials Sciences businesses, ECO+ sales have higher margins compared to non-ECO+ sales.

An example of an ECO+ product in the Life Science business is Brewers Clarex[®]. This breakthrough enzymatic solution for the brewing industry helps preventing turbidity of beers through the elimination of residue formation during the cold stabilization, a part of the brewing process. As a result, the stabilization period of beer is shorter compared to when traditional powdered stabilizers are used. Moreover, the cooling temperature can be higher during the cooling stabilization which saves energy. The use of Brewers Clarex[®] can thus lead to a reduction of between 5% and 8% of the total carbon footprint associated with brewing.

Another example of an ECO+ product in the Materials Science business are DSM's resins for the production of high performance coatings which are based on water rather than harmful solvents. Water-based resins help reduce emissions of volatile organic compounds to near zero level, which in turn reduces the formation of smog in China.

ECO+ Life Cycle Assessment



People+ Life Cycle Assessment



People+

People+ is DSM's program to develop solutions that measurably improve the lives of consumers, employees and communities across the value chains. People+, in combination with ECO+, makes DSM's 'Bright Science, Brighter Living' mission more tangible.

In 2014, DSM, together with a group of 12 European industry leaders, launched the 'Handbook for Product Social Impact Assessment'. This is the first practical and broadly accepted methodology for assessing a product's social impact throughout its life cycle and has been formulated and tested based on input from international standards and consultations with researchers, industry hubs, development organizations and NGOs (non-governmental organizations). This Life Cycle Assessment (LCA) methodology provides a clear framework through which companies, including DSM, can analyze life-cycle data and calculate the impact products have on human health, development and well-being.

People+ enables DSM to identify new levers for innovation, to develop value propositions and engage with partners in the value chain. By concentrating on the impact that its products have on the lives of people involved in making and using the product, the People+ program is an incentive for innovation and research and development across the company.

An example of a People+ product is OatWell®, which is made of oat and added to cereals and porridge. Research shows that the consumption of just three grams of oat beta-glucan per day can reduce the risk of cardiovascular diseases. OatWell® also has clinically proven health benefits in the areas of blood glucose control and general gastrointestinal health. At the same time, the oats that are used for OatWell® create benefits for communities in the Nordic countries from where they are sourced, which contributes to local employment and prosperity.

Sustainability in China

DSM has dedicated departments for Corporate Sustainability and Corporate Operations & Responsible Care. In China, the Operations & Responsible Care department is responsible for all corporate safety, health and environmental (SHE) issues. Moreover, line management is supported by sustainability and SHE managers at the site level. The DSM SHE platform, composed of all sites' SHE managers, plays an important role in developing practices and communications regarding SHE issues. The China Operations & Responsible Care department also leads the China Manufacturing Committee. The Committee, composed of all site managers, is responsible for jointly driving and improving sustainability performance in DSM's manufacturing processes.

DSM China also established a regional sustainability committee in 2012 which works to increase awareness of sustainability as a business growth driver by organizing sustainability events and by quarterly reporting. In 2014, this China sustainability committee was incorporated into the DSM China Leadership Team, which is composed of all business directors and functional leaders across China.

Strategic target and progress reporting

At the global level, DSM has been reporting progress in sustainability on a quarterly basis for many years. In China, the company published its first regional China Sustainability Report in 2008, as a supplement to DSM's Global Sustainability Report for 2007. Since then, DSM China has published a local sustainability report annually to report its progress in People, Planet and Profit to its stakeholders in China, such as customers, suppliers, employees, media or government. In order to meet the global trend of integrating annual financial reporting and sustainability reporting, DSM started in 2011 to publish all activities together in its DSM China Integrated Report.

Stakeholder engagement

DSM seeks to address some of the world's most pressing social, environmental and economic challenges by offering highly innovative and sustainable solutions. By reaching out to its stakeholders – customers, investors, employees, companies, governments, academia and civil society – DSM engages in an ongoing dialogue to exchange thoughts and views. Stakeholder consultations help to deepen the company's insights into the drivers of its business and the needs of society across different regions. By working together, DSM and its stakeholders can create shared value and contribute to a more sustainable world.

In its more than 110 years of existence, DSM has always been able to transform itself in response to societal changes, with a focus on innovation and the long-term perspective, acknowledging stakeholder needs. For this reason, DSM focuses on four growth drivers that are important in supporting and accelerating the transition towards more sustainable economic development.

In China, where GDP growth is estimated at around seven percent, policy makers are increasingly focused on sustainable growth levels and on domestic consumption. The country's leadership appears determined to tackle some of the nation's most pressing problems such as environmental degradation and corruption. The focus on sustainability, clean energy and food safety and security is favorable for DSM in China and offers good growth opportunities.

Stakeholders

DSM is committed to creating value for its broad range of stakeholders by leveraging unique opportunities in Life Sciences and Materials Sciences for people today and generations to come. It recognizes that in this ever more complex world, companies, governments, academia, civil society and international institutions must work together to solve the big global issues of today. These include the question of how to deal with major global demographic changes, and the rise of new economies and an aging population. They also relate to climate change and the development of alternative energy, and how to secure health and well-being by resolving food and nutrition security and water issues.

Customers

DSM embraces true customer centricity in its focus on excellence in marketing and sales. The company is committed to becoming a part of the top quartile of customer-centric companies and therefore has developed a detailed roadmap to continuously improve its marketing and sales capabilities. To support this, DSM is using the Net Promoter Score® (NPS), a customer interaction cycle that has become the lead performance indicator for loyalty and advocacy tracking. NPS equips the company with the processes, tools, and expertise needed to drive customer centricity across the

business and to achieve optimum results. In the chemical industry DSM is a front runner in using the NPS methodology. The essence of the NPS methodology is creating a closed loop to continuously improve the customer experience. DSM has developed a tailored NPS program that is used by all its business groups.

In 2014, DSM focused on enhancing the use of NPS as the lead performance indicator of customer centricity in the organization. A full DSM baseline has been developed, with an overall score for DSM of 36 percent, putting it amongst the leading companies in its sector. Furthermore, an e-learning tool was introduced to train all relevant employees on the basics of NPS.

A crucial part of DSM's customer business development approach is that the company focuses on working with the entire value system, which includes partners within and across its value chains. This way of collaborating is an effective way to drive sustainability and to come up with innovative solutions that benefit business and society. An example of this are cage nets for aqua-farmers made from Trevo®, a high performance fiber. By partnering with East China Sea Fisheries Research Institute, DSM ICD High Performance Fibres developed a deep sea aquafarm cage net which provides a safe environment resembling the wild for the yellow croaker, a highly valuable fish species. The new cage net design not only creates great economic value for aqua-farmers but also reduces the use of antibiotics, which improves the quality of the fish. The new technology also protects the coastal environment because the cage net material based on Trevo® enables fish farmers to put their nets into deeper seas farther away from the shore as the new material enables them to withstand the heavy wind and water flows common at sea. Thus, pollution created by intensive fish farming near the coast can be avoided.



Off shore aqua farmers cage nets with Trevo®

DSM is also increasing its focus on developing innovative channels to reach customers and create more value for them. This is leading to a stronger emphasis on the 'human' stories behind the product, rather than its technical properties. This wider relevance creates stronger bonds with our customers. For example, DSM Animal Nutrition & Health in China

has established an official WeChat account to serve as a communication tool for DSM to connect with its customers sharing technical know-how. It also functions as an interactive platform for DSM to listen to customers' needs and answer their questions, for example about the correct product application. Answers are provided instantaneously, including advice by technical experts for more complicated matters.

Another innovative example of helping end users is a new mobile application (APP) called "Chicken Go", also developed by DSM Animal Nutrition & Health. On this APP, Chinese poultry farmers can compare their own farming data with some benchmarks provided by DSM in terms of vitamin levels, feed formulations and egg qualities. In this way, farmers can easily find solutions to improve the quality of their eggs, which further increase their economic returns.



"Chicken Go" APP

Employees

Every day, DSM's employees work in diverse areas of health, nutrition and materials, creating value for customers by helping them provide solutions to some of the world's greatest challenges. DSM encourages people to plan their career paths and supports them in developing their skills and knowledge. The company is always looking for people who find different ways to add value and contribute.

On 22 April 2014, DSM locations worldwide hosted DSM Earth Day events for the first time, in order to encourage employee action and awareness of sustainability topics. During these events, employees at 19 manufacturing sites and four offices in China made over 1500 commitments on how they would personally contribute to sustainability. The successful events gave employees the chance to think about how they could make a difference in protecting their own environment.

The participating sites and offices also organized other activities to demonstrate their support for sustainability. For example, in Shanghai an insightful keynote speech was given by Professor Qi Ye, a well-known thought leader from Tsinghua University, who also serves as an advisor in DSM's external Sustainability Advisory Board. Besides, there was an

innovative exhibit of sustainable products in Shanghai campus to give examples of how DSM has brought people brighter living with innovative technology. In DSM Laiwu site, there was holding a low carbon Olympic games. In the Nanjing office, employees promoted green transportation and shared their sustainability practices.



An innovative exhibit of Sustainable Products in Shanghai Campus

DSM has been measuring employee engagement and satisfaction since 2008. The company's Employee Engagement Survey helps DSM to manage and develop its human capital and to stimulate growth through people. The survey creates an important benchmark to establish whether DSM continues to be among high-performing companies that are attractive for talented people and is able to keep its employees energized and inspired (For a full description of the survey see People in 2014 on page 30).

Governments

DSM believes that dialogue between businesses and government authorities is a constructive part of the legislative decision making process. An important goal of that dialogue is to create a reliable regulatory framework and favorable conditions for business activities, and thus promoting business success. DSM encourages legislators to promote competitiveness and innovation, as DSM and its customers need to be competitive and innovative to stay successful.

DSM is committed to acting with responsibility and transparency when it comes to sharing its expertise with policymakers and government authorities in all markets. DSM engages with policymakers worldwide on various topics, including nutrition, energy and industrial biotechnology.

For example, in March 2014, DSM CEO Feike Sijbesma joined a dialogue with the Chinese leadership at the Netherlands-

China Trade and Economic Forum in Noordwijk, the Netherlands. China's President Xi Jinping was present along with King Willem-Alexander of the Netherlands, and large business delegations from both countries. During the event, Mr. Sijbesma reconfirmed DSM's commitment to China and its willingness to contribute to improve the environmental, societal and economic progress of our world.



DSM CEO Feike Sijbesma with Chinese Premier Li Keqiang

Since 2013, DSM has been attending the Global CEO Council (GCC) of the Chinese People's Association for Friendship with Foreign Countries (CPAFFC). Consisting of 14 CEOs from global leading multinational companies including DSM CEO Feike Sijbesma, the GCC with its annual Round-Table Summit, is an important communication platform for direct dialogue with high levels of the Chinese leadership including premier Li Keqiang. At the second Round-Table Summit which took place in July 2014, DSM contributed its experience on the topics of circular economy and biofuels.

Civil Society

Throughout the year, DSM has engaged a wider audience to talk about the challenges the world is facing, such as hidden hunger and climate change, as well as the opportunities that can be created by sustainable development. For example, company representatives regularly meet with non-governmental organizations to exchange views and experiences.

Suppliers

Supplier Sustainability Program

With more than 40,000 suppliers globally, DSM strives to support efficient engagement efforts along its value chain. To this end, the company engages its partners through its worldwide DSM Supplier Sustainability Program (SSP), incepted in 2006. The program consists of two main parts - compliance & risk management, and supplier solutions

- and is implemented by the DSM Purchasing Leadership Team. The main element of the compliance aspect is DSM's Supplier Code of Conduct which all suppliers must adhere to. Progress towards clearly defined targets in the Supplier Code of Conduct is shared on a monthly basis within DSM's purchasing community, and quarterly reports are shared with the Managing Board. Meanwhile, Supplier Solutions means that DSM also focuses increasingly on proactive dialogue with suppliers in creating joint value and engaging them in areas related to the company's ECO+ and People+ programs. Besides, DSM regularly trains its own purchasing personnel in compliance and sustainability issues and recognizes outstanding efforts by cross-functional purchasing teams with its Strategic Sourcing Awards and Supplier Innovation Awards.

Critical Suppliers

In the compliance field, DSM focuses on the performance of 1,200 so-called critical suppliers. Included in this definition are suppliers who provide DSM with critical components, are located in potentially high risk countries, are non-substitutable or high volume suppliers, or have potential for creating shared value in the areas of innovation and sustainability. Critical suppliers are named by each business group, taking into consideration both business risks and sustainability risks.

Together for Sustainability

In 2014, DSM joined the "Together for Sustainability" (TfS) initiative which was founded in 2011 by the Chief Procurement Officers of six multinational chemical companies. The purpose of the initiative is to develop and implement a global audit program to assess and improve sustainability practices within the supply chains of the chemical industry. TfS has so far defined 30 main audit criteria applicable to all members. All audit findings are documented as a standardized supplier scorecard automatically visible to TfS member companies. This is far more efficient and transparent than if all chemical companies conduct their own audits. Through joining TfS, DSM can move from its current self-assessment questionnaires and individual supplier audits to the initiative's standardized platform which greatly simplifies compliance monitoring. Support for suppliers in making progress is part of the initiative as well.

Audit results/overview of supplier sustainability program 2014

	Global	China
Sustainability audits	40	9
Quality audits	294	35
Supplier solution projects	30	7

The Triple P project in China

In 2013, DSM initiated its 'China Triple P Supplier Engagement and Capability Building' project that aims to use the People, Planet and Profit (Triple P) approach to engage suppliers in a more committed business collaboration and jointly create a more sustainable supply chain in China. DSM Purchasing launched this project through its partnership with Solidaridad, a global non-governmental organization specialized in sustainability audits. In May 2014, phase I of the project closed successfully. Each € 1,000 investment from DSM triggered initiatives that brought in approximately € 8,000 in efficiency improvements at the suppliers' sites.

In July 2014, the roll-out of the Triple P project continued with phase II. During the year, Senior experienced sustainability and productivity experts from DSM and external human rights experts organized workshops and offered in-house technical support to six selected supplier factories which showed interest in making genuine environmental, social and economic improvements. On-site baseline sustainability assessments and final evaluations were carried out to measure the potential impact and progress in performance. The suppliers thus benefit from energy efficiency improvements and footprint reduction (ECO+), a better Safety, Health and Environment (SHE) performance and enhanced communications between employees and management (People+). Thus, the project helps with identifying and creating benefits related to DSM's Triple P sustainability programs at suppliers' facilities.

DSM advises participating suppliers on how to include sustainability considerations and criteria in their own supply chain management, providing them with relevant knowledge, experience and tools. Moreover, DSM organizes customized staff trainings for them in order to improve their employees' awareness on how to benefit from energy efficiency and improved SHE management.

Collaboration with peers

World Economic Forum (WEF)

DSM expanded its collaboration with the World Economic Forum to a strategic partnership. As a strategic partner, DSM is involved in a number of initiatives, including the WEF's New Vision on Agriculture platform which supports national and regional partnership platforms in 16 countries across Africa, Asia and Latin America, which have to be locally driven multi-stakeholder and market-based initiatives to develop sustainable agricultural practices. According to the Vision, agriculture must continually improve in delivering food security, environmental sustainability and economic opportunity.

At the Annual Meeting of the World Economic Forum in Davos in 2014, DSM sponsored the United Nations' World Food Program tent, and organized events and discussions on hunger, malnutrition and climate change. It was also represented at various regional WEF meetings, including the Annual Meeting of the New Champions in Tianjin.

World Business Council for Sustainable Development

As a member of the World Business Council for Sustainable Development (WBCSD), DSM is involved in the council's Action2020 platform for businesses to positively influence environmental and social trends while strengthening their own resilience to issues like climate change, demographic dynamics and skills shortages. DSM as one of 16 co-chairs of the WBCSD has taken on a leading role in core areas of Action2020 such as sustainable lifestyles, safe and sustainable materials and social impact.

DSM is also a Board Member of China Business Council for Sustainable Development (CBCSD).

Public-Private Partnerships

DSM sponsors children's Drum Team in impoverished region

Since 2013, DSM has been sponsoring a children's drum team in YanAn, Shaanxi Province, which in turn was named "DSM An Sai Children Drum Team". The sponsorship covers 100 children under the umbrella of the Rainbow Bridge Program initiated by the Chinese People's Association for Friendship with Foreign Countries (CPAFFC). The Rainbow Bridge Program is aiming to build bridges by imparting knowledge and skills between China's old poverty regions and multinational corporations.

In October 2014, the DSM An Sai Children drum team was invited by CPAFFC to attend and perform a show at the world cup opening ceremony in Beijing.



An Sai Children drum team

Hope Kitchens for schools in poor regions: A partnership with the China Youth Development Foundation

Since 2012, DSM China has been supporting the “Hope Kitchen” program initiated by the China Youth Development Foundation (CYDF). The program aims to improve the diet of rural school children as well as the nutritional knowledge and food safety practices of rural teachers and kitchen staff. To this end, DSM has donated RMB 120,000 to build four “DSM Hope Kitchens” in primary and secondary schools in poor areas of China. Every DSM Hope Kitchen is equipped with standard cooking utensils, refrigerator, disinfection cabinet, as well as nutrition guidelines and food safety practice posters and booklets. Headmasters from the respective schools received training on children’s nutrition and food safety. Experts from DSM also provided support to kitchen staff on how to ensure they provide safe and nutrient meals to the students.



“DSM Hope Kitchens” in primary and secondary schools in poor areas of China

DSM's Partnership with China Nutrition Society

Since 2011, DSM has been partnering with the China Nutrition Society (CNS) in running the DSM-CNS Nutrition Research Foundation which provides incentives and financial support for nutrition researchers exploring advanced nutrition solutions.

The DSM-CNS Nutrition Research Foundation funds research in two key areas: the effects of vitamins, omega-3 fatty acids and phytochemicals on the geriatric population, and on how nutrition can help protect against air pollution. Since 2011, the number of proposals to receive funding has risen from 8 to 13. To date, a total of 43 projects have received DSM-CNS Research Foundation funding.

DSM Scholarship at Sichuan Agriculture University

Since 2011, DSM has been granting its DSM Scholarship at the Animal Nutrition Institute of Sichuan Agriculture University. It provides financial support to good students in unfavorable financial situations and honors students for outstanding academic achievement. As of late 2014, DSM has provided a total of RMB 200,000 to the university. More than 60 students have received financial support.

DSM annual charity event – Bright experience

DSM runs a partnership project with the United Nations' World Food Programme (WFP) called 'Improving Nutrition, Improving Lives'. It aims to improve the nutritional value of the food that WFP distributes to its most vulnerable beneficiaries. The project delivers improved nutrition products to more than 20 million people. Moreover, DSM and WFP jointly promote increasing awareness and funding to help eradicate malnutrition.

In China, large numbers of DSM employees and staff from partner companies attend DSM's annual charity fundraising event. Themed "Hunger is Solvable: Bright Experience", the latest such event on September 20, 2014, raised funds for WFP and the China Foundation for Poverty Alleviation (CFPA) in their fight against hunger and malnutrition. These funds are donated to WFP's School Feeding Programs worldwide and CFPA's school meal program in poor areas of China. More than 2,000 DSM employees and their families, as well as employees from partners in 14 sites across China joined the event, thus showing their solidarity through funding the efforts.



"Malnutrition in China has drawn more and more attention from government, media and the public. People have realized calorie alone is not enough to improve individual health, and nutrients also need to be highlighted, especially for the most vulnerable people who have to face food insecurity. No single organization can act alone to achieve the goal of ending hunger and malnutrition. We are grateful for DSM's continued support to help us reach zero hunger."

Brett Rierson, WFP's Representative in China

"This year will be the sixth time that the CFPA has participated in the event. Through this event, we expect to further raise public awareness of child hunger and malnutrition. In China, through this DSM project, we have provided 50,000 nutritious meals to more than 100 children in poor areas of Yunnan and Sichuan provinces."

Qin Wei, assistant to Secretary General of CFPA

On September 20, 2014, DSM organized its annual charity fundraising event, themed "Hunger is Solvable: Bright Experience"



One DSM Culture Agenda China Award Culture Element Award - Inclusion and Diversity

Winner Team: DSM China Ltd. (DCL)

DCL WeChat connect all stakeholders in one page

To promote DSM corporate images and improve employee engagement, DSM China Corp. Branding and Communications team created Wechat account as an official communication platform. Adding an efficient communication tool for all employees in China. The account contains DSM China news, culture updates, market events, product introductions and other services. Meanwhile, it would be the main channel that can reach all employees including those who don't have DSM official email account. So far we have already 2300 followers in first month launch.



One DSM Culture Agenda China Award Culture Element Award - Accountability for Performance

Winner Team: DSM China Ltd. (DCL)

Brand and pride building-DSM China shines in the 200 years celebration of the Kingdom

DSM China was highly recognized, both externally and internally for its overall performance at the 200 years celebration of the Kingdom in 2014, there premium guest world wide including the King of the Netherlands, German President, companies leaders attended. DSM CEO Feike recognized:"China team in this project is by far the best cross all regions and companies". Dutch Ambassador also highly appreciated it and a Dutch TV station picked up China live connection with President Jiang Weiming as a separate report - all in all great branding values and exposure to DSM. The outstanding performance comes from the team effort of corporate communications, ICT, operations team, their can-do attitude, hard working, creativity and collaboration with speed make it happen.



One DSM Culture Agenda China Award Culture Element Award - External Orientation

Winner Team: Human Nutrition & Health (HNH)

Win-win with a key customer

Put ourselves in customer's shoes, DSM has provided friendship in NEED: seamless cooperation of different functions including technical, marketing, sales and Fortitech premises team, helped our key customer launch their product in a short time. "A friend in NEED is a friend indeed": the capability and full commitment of DSM team won the recognition and appreciation from the customer, which also got DSM critical breakthrough in the other two new projects for this customer brand.



One DSM Culture Agenda China Award
Culture Element Award
- Collaboration with Speed

Winner Team: DSM Resins and Functional Materials (DRF)

Fast global collaboration brings new product sales

During Q2 of 2014, DRF Powder coating team got a request from two customers for product optimization. Usually it takes more than half a year from the customer request to new product launch. However, it took Powder, Can & Coil (PCC) team less than 2 months to finish the whole process and got high satisfaction from the customers. The newly developed product succeeded and demonstrated its great marketing potential in a short time. This comes from the fast collaboration with speed by cross regions teams cooperation and customer orientation!



One DSM Culture Agenda China Award President Award

Winner Team: DSM Engineering Plastics Asia Pacific (DEPAP)

The first local strategic innovation account for Xiaomi

DSM Stanyl ForTii XS85 was approved for cellphone frame splitter application by Xiaomi, a fast growing and leading cell phone player worldwide. DSM XS85 material outperformed 14 kinds of material of competitors in color stability, mechanical properties, and chemical resistance. DSM product development team worked out 12 recipes within 10 days. The team's collaboration spirit and can-do-attitude is highly appreciated. This great success comes from DSM employees' external orientation, collaboration with speed, accountable for performance, and responsible attitude.

Key data for DSM China 2014

	2014	2013	2012
People			
Workforce by Dec. 31	3489	3600	3569
Female / Male ratio	30/70	30/70	30/70
Frequency Index of recordable injuries (per 100 employees; DSM and contractors)	0.17	0.15	0.14
Planet			
Energy use (in PetaJoules)	8.97	8.59	7.72
Water use (in million m ³)	5.80	6.20	5.81
Greenhouse-gas emissions in CO ₂ equivalents (x million tons)	0.92	0.73	0.79
Emission of volatile organic compounds (x 1000 tons)	1750	2349	1202
COD (Chemical Oxygen Demand) discharges (x 1000 tons)	46	159	120
NO _x (tons)	136	231	198
SO ₂ (tons)	9.4	93	93
Landfilling non-hazardous waste (tons)	59.6	5414	2172
Environmental incidents (cases)	1	0	0
Profit (in USD million)			
Net sales 2014 China, continuing operations	1956	1714	1700

*The data exclude all DSM Sinochem Pharmaceuticals (DSP) sites since 2014. DSP, a joint venture with Sinochem, was deconsolidated following new accounting rules for joint ventures.

People in 2014

People at DSM

DSM encourages its people to develop and build their careers by broadening their skills and knowledge. It seeks to attract people who can add value and contribute in different ways. Most importantly, DSM wants original thinkers and doers who can stretch and move the company forward, in line with the organizational needs. This means employees are encouraged to do everything they can to nurture and realize their bright ideas, in a working environment that promotes health, personal initiative, an entrepreneurial mindset and inspirational leadership.

As a global company, with 89 nationalities, more than 200 sites and offices in over 50 countries, it is important to create a shared culture that embraces differences. DSM aims to grow collaboration to harness the power of its global workforce.

DSM's human resources strategy contributes to the development of inspiring and collaborative leaders. It creates an engaged and competitive workforce and fosters an inclusive environment in which people trust and respect one another, and where they encourage each other to achieve sustainable and focused business growth. The approach is supported by the ONE DSM Culture Agenda, which is explained further below in this chapter.

DSM aims to become more international, in order to bring its business closer to its key markets and customers and make it stronger. To this end, it seeks to stimulate inclusion, diversity and innovation. It also combines a strong regional infrastructure with clear Managing Board-level accountability for regional performance. The company's human resources strategy supports DSM's internationalization goals.

ONE DSM Culture Agenda

The ONE DSM Culture Agenda was designed in conjunction with DSM's Leadership Model, and aims to support the company's strategic alignment with the needs of an ever-changing world. It seeks to create a common language across the organization, building greater cohesion and enhancing DSM's culture. Through its implementation, DSM aims to become a high performance organization and achieve its business objectives.

Introduced to executives in late 2012 and to the larger employee base in 2013, the focus in 2014 was on fostering different ways of working by applying its four themes across the company's daily operations. Influenced by the results of the Employee Engagement Survey in 2013, the 2014 approach sought to address three main audience segments:

- Line managers and their ability to role model and champion newly expected behaviors around External Orientation,

Accountability for Performance, Collaboration with Speed, and Inclusion & Diversity;

- Employees and their ability to embed the four themes into daily operations, thereby making the new behaviors their own; and
- Growing the Circles of Thoughts through highly active and enthusiastic communities to create a bottom-up drive and energy around the four themes.

Among the highlights in 2014 was the growth of the Circles of Thoughts. These regionally organized groups initiated a number of thought provoking and creative activities that led to a further embracing of the themes, as well as quarterly conversations of our employees with managers.

This resulted in more visible role modeling, coaching and guidance for their teams in the adoption of the four themes. It also enabled employees to see the benefits of working differently, and celebrating the champions among them.

Frequent references to the four themes in daily communications across all regions, and in the initiatives owned and led by the regions and business groups, encouraged their adoption, even while more remains to be done. This was particularly true for DSM's Inclusion & Diversity efforts. In 2015, DSM will continue to emphasize the segmented approach to the three audiences, transferring further ownership to regions, in particular in China and to the business groups, and focusing also on an increased empowerment of the Circles of Thoughts.

External Orientation



DSM recognizes that in order to execute its growth strategy and to adapt to changing customer and industry requirements, its employees must be aligned with the realities of a rapidly changing world. This means not just anticipating customer needs to drive marketing, sales and innovation priorities, but also being better able to learn and compete across all functions. External Orientation also helps to broaden DSM's networks and engage with stakeholder groups.

In order to promote External Orientation among employees in China, DSM held a "FUN BG DAY" in November 2014 at DSM's Shanghai Campus, during which the various business groups (BG) introduced their activities to and shared their best practices with other employees. Vivian Huang said: "Through this activity, themed ONE DSM HARMONY, our employees learned to better understand the company's business, know more about application areas and customers for our products, and gain more ownership."



Vivian Huang

Accountability for Performance (and learning)



DSM expects its employees to set themselves ambitious targets and to deliver on these.

Accountability for Performance (and learning) is about people taking responsibility for their

actions and for the performance of their teams. It also means recognizing and celebrating successes, while viewing problems and mistakes as individual and collective learning opportunities.

Ad-hoc offline discussions and exchange between BGs are taking place from time to time. To start a more systematic approach, DSM in November held a project-based cross-functional innovation workshop at the Shanghai Campus, inviting 20 colleagues from different BGs to develop new initiatives. The new initiatives can bring perceivable added value to customers by providing holistic solutions based on joint capability from cross-BG efforts.

Collaboration with Speed



In an ever more connected world, collaboration has become an important competitive advantage.

DSM encourages employees to actively (co-) create, and to share and build on the ideas,

information, knowledge and expertise of their colleagues and the outside world. By fostering collaboration, DSM taps the true potential of its global workforce and promotes faster decision-making and execution.

DSM China organized a “Zero-Email day” in Shanghai in June 2014. Penny Li is excited about that: “On this day, we asked

participants from different teams to meet face to face for Culture Chats rather than exchanging E-Mails. These meetings generated many good ideas, one of which, focusing on effective meeting organization, won a global DSM award.”



Penny Li

Inclusion & Diversity



Fostering an inclusive culture that embraces differences is consistent with DSM’s corporate values and helps it create the high-performance organization it requires as a truly global company.

A more balanced DSM leadership group in terms of gender and nationality is part of these efforts and will improve decision making processes and the implementation of its strategy.

In July, DSM China hosted an Inclusion & Diversity Seminar themed: What does Inclusion & Diversity bring to a high-performance team building?

Tina Dai said: “Participants from different functional teams, different countries and different cultural backgrounds were

invited to share their insights on Inclusion & Diversity at

the company’s Shanghai Campus. The meeting was very inspiring and gave us a lot of input to make a good agenda for the rest of the year and for 2015.”



Tina Dai

ONE DSM Culture Agenda - China Award

To better “Do, Act, and Own” the One DSM Culture Agenda and motivate people to take initiatives, DSM recognizes and rewards role models. In 2014, DSM launched the systematic DSM Culture Agenda – China Award.

Over 35 applications were received from different business groups and units, various sites and function teams for a series of awards. The winners were chosen by the Culture Award committee, employees, management team and DSM China operation board and announced during the annual dinner: 1 president award, 4 culture awards, 2 operation awards and 2 culture ambassador awards.

Culture Ambassador Award

Chen Xiaoli, Xinghuo Site



Chen Xiaoli: “For me and all the employees working here, Xinhuo site is the other half family where we all work hard on cultivating a better, happier and healthier atmosphere; this award belongs to all the employees in Xinhuo.”

Vera Qu, Shanghai campus



Vera Qu: “Culture is fundamental for our company to develop and grow; the four themes of ONE DSM Culture Agenda indicate the recipe for DSM showing the specific improvement direction and I believe it is not only right and good to the

company but also to the individuals. Big change cannot be made overnight, however change from yourself can be easily done and influence the people around you, just be part of it and expect the joy it brings.”

China President Award

The first local for local strategic innovation account for Xiaomi –DSM Engineering Plastics Asia Pacific (DEPAP) DEP’s material was approved for cellphone frame splitter application by Xiaomi, it outperformed 14 kinds of materials of competitors in color stability, mechanical properties, and chemical resistance. Another key factor was the fast development and excellent technical service. DSM product development team worked out 12 recipes within 10 days and figured out which one was the best, and DEP Jiangyin site just used 10 days to finish scale up trial.



Award dinner for DEPAP team on the first local for local strategic innovation account for Xiaomi

It was a break through in this new segment and a key step in successful implementation of DEPAP local for local strategy.

Road Show and Local Events

In line with the ONE DSM Culture Agenda, many local cultural events were organized across different branch offices and sites in China to spread the agenda to all sites on the ground, and to further promote its elements to China.



ONE DSM Culture Agenda Roadshow in Nanjing office

DSM Employee Engagement Survey

An engaged workforce is critical for DSM to realize its ambitions. Engagement is about creating an inclusive and high-energy working environment, where employees are aligned and energized to contribute to the company's success. The DSM Employee Engagement Survey is an effective tool for understanding the requirements of employees. Its goal is to create a company in which employees feel proud to work, and where they feel they can excel.

In 2014, DSM held its seventh worldwide Employee Engagement Survey. A total of 17,684 employees, including 408 contractor employees, completed the questionnaire, which was distributed online and on paper in 18 languages to all DSM employees. In China, a total of 3,125 employees shared their feelings and gave feedback. The response rate of 95 percent was an inspiring record, the detailed results

on engagement index and so on are now reviewed in the respective teams.

DSM has conducted its Employee Engagement Survey each year since 2007 and will continue to use it to guide its ONE DSM Culture Agenda to become a high performing company. DSM will move this survey into a two-year cycle with a full survey in one year and a pulse survey the next so that it has more time to follow up on results and actions, with the next full survey in 2016. The shortened survey to be held in 2015 requires less time from respondents and is easier to manage and follow up on. The pulse survey will be set up as a short questionnaire for all employees to have the opportunity to express their opinions. At the same time, all business groups will have insights into the engagement progress.

Talent Acquisition

DSM's human resources strategy contributes to the development of inspiring and collaborative leaders, creates an engaged and competitive workforce and fosters an inclusive working environment in which people trust and respect one another, and where they encourage each other to achieve sustainable focused business growth. So, DSM has made the recruitment of diverse talent for today and tomorrow a top priority.

DSM continuously creates sustainable solutions to many of the world's most important challenges. Working for DSM is about doing something meaningful to improve people's lives. This means doing everything we can to spark, nurture and realize our people's bright ideas for translating customer needs into new opportunities. This takes place in a working environment that promotes health, personal initiative, an entrepreneurial mindset and inspirational leadership.

Young Talent Program

In late 2013, DSM China has started its 'Young Talent Program' (YTP) to strengthen our future talent pipeline. This program aims to hire the best graduates in China and provide them with an exciting career journey at DSM, with development tools and personalized learning & development.



20 fresh graduates hired for the 'Young Talent Program' in 2014

To find and recruit suitable candidates, the China Talent Acquisition Team held events at eight top Universities in China where they showcased DSM and its business, core values and people to the students in order to present itself as an attractive employer. 20 talents were hired for the YTP Class of 2014, and a further 10 hires will be onboard in the middle of 2015.

Talent management

Leadership Model

The DSM Leadership Model specifies the characteristics expected from leaders now and in the future in a simple, understandable and compelling way. It provides a common vision and language regarding the leadership that DSM requires to succeed. The model sets out the expectation for leaders to be role models and developers of a sustainable and successful organization for the future. It is the basis for high quality processes to hire people, grow and develop talent and build high-performing teams.

In 2014, DSM made significant progress on the implementation of the model. By the end of 2014 almost 90 percent of the executive population had participated in DSM Leadership Model awareness workshops around the globe, which resulted in very positive evaluations. The Leadership Model is now embedded in executive recruitment, appointments and promotions, and the Executive Leadership Programs. In addition, in 2014, all executives were assessed in their annual Performance and Development Review on the five Leadership elements, with a clear focus on strengths and development areas. The executive leadership assessments and 360° feedback tool have also been developed and are being implemented.

Evaluations performed in 2014 show that the model supports a common vision regarding the type of leadership that DSM requires. It was embraced by DSM executives as a common language and a lens for talent discussions and decisions.

DSM decided to roll out the Leadership Model further across the organization in 2014 to all managers and employees in senior management roles. For this enlarged target group, DSM will use the Leadership Model as a development framework. A group of over 100 internal facilitators were trained across the globe to support the workshops for this roll-out. In China, DSM has begun to organize Leadership Model workshops, of which the first TTT (Train-the-Trainers) session was held in October, 2014, working closely with the Global Talent Management team. In 2015, a total of ten workshops have been arranged, where approximately 200 aspiring leaders will be trained.

The DSM Leadership Model plays an important part in the recruitment process. It gives the organization a guideline for

the profile it strives to hire and retain, through competency-based interviewing techniques that increase objectivity and effectiveness. To this end, a practical guide for interviewing and selection has been introduced that is based on this model.

Asia Connect Program - Mentoring

The Asia Connect Program was initiated in December 2012 sponsored by DSM executive management. This mentoring program aims at multiplying talents through four main objectives: accelerating development of talents, upgrading leaders' skills in developing others, as well as attracting & retaining talents by providing a custom-made development platform. The program also strives to multiply growth through realizing DSM geographic ambitions, creating succession, taking bold business decisions and being "fit for the future".

Employees are connected to mentors based on their preference, a process that is supported through match making by the Asia Connect project team. Its effectiveness was monitored during the six months of the program and evaluated by surveys. The program also provides training for both mentors and mentees.

In 2014, three pilot sessions were conducted with more than 140 talents from across Asia and a total of 44 executives and selected leaders acting as mentors. Activities included group events, and a follow-up process with evaluations for both parties has been set up. The overall satisfaction rate in 2014 was 88 percent. Based on its success, the program is continued in 2015 for the US, Asia and Netherlands regions.

Organizational learning

To fulfill its mission of creating brighter lives for people today and generations to come, DSM nurtures a culture of continuous learning, discovery and improvement. It also strongly believes in the need to invest in the knowledge, skills and experience of its people to ensure their long-term employability.

Learning and development is key for the high-performance culture that DSM requires in order to achieve its strategic objectives, and gives people the chance to build their capabilities, develop their careers and reach their full professional potential. It is also vital for strengthening the talent pipeline and for developing inspiring and collaborative leaders of the future.

At DSM, learning goes beyond the classroom. The most valuable lessons are often learned by employees on the job, from other colleagues or from mentors and coaches. Learning together allows DSM to create communities across the breadth of the organization, bringing people together, fostering collaboration and promoting an inclusive working environment

in which everyone's contribution is recognized, valued and rewarded.

The DSM Learning Architecture consists of four program clusters: executive programs, management programs, functional programs and e-learning programs. These are designed and delivered in close collaboration with leading international business schools and global and local training providers (IMD, Wharton School of the University of Pennsylvania, Babson College, Erasmus University Rotterdam, Schouten and Spread etc.) and are supported by a diverse internal faculty, primarily consisting of DSM's top management.

Targeting various groups and talents, DSM organized kinds of learning programs in China in 2014. The 2nd Bright Talent Program Asian Edition was organized covering 24 high potentials employees from different countries in Asia. The 3rd Management Leadership Program (MLP3) Asian session was also held for 25 talents from diverse business groups across Asia. New Manager Boost Kit Programs were held for 30 newly promoted managers in China. A two-year learning journey started off for 18 fresh graduates hired via the Young Talent Program.

WIN – Women Inspired Network

WIN is a women-led and initiated organization with a mission to identify and champion the concerns of women employees at DSM, which aims to create a supportive environment that encourages, enables, and equips women to reach their top potential and contribute to the success of DSM.

Research shows that companies which promote women to senior roles are better equipped to make good decisions, and as a result, outperform their competitors. Gender-balanced management teams are better able to understand their stakeholders and customers, and are more open to new ideas.

DSM is making progress, but the representation of women remains fragile compared to the benchmark. The Women Inspired Network (WIN) network is important for the organization because it contributes to the attraction, retention and development of women at DSM.

The WIN consists of three regional groups – DSM Netherlands, DSM China (newly established in 2013) and DSM North America. The roles of the networks are to create opportunities where women and/or other underrepresented groups may connect and thereby contribute to Inclusion. While this network is for women, all DSM employees are welcome to attend its events. In October, DSM China WIN team held Webinar of "Work life Energy" in Shanghai Campus and shared insights on balancing in work and life through video connection with all other sites in China.

Safety

Occupational Safety

DSM strives to create an injury- and incident-free working environment for its employees as well as its business partners for all times when working with DSM. To achieve this, DSM has designed a comprehensive safety program within its Safety, Health and Environment (SHE) framework, which enjoys high priority cross the whole organization.

DSM has set itself the target of reducing the Frequency Index of Total Recordable Injuries (TRI-all) by 50 percent by the year 2020, which means down to an index score less than or equal to 0.25 by 2020, compared to 0.57 achieved in 2010. This target is also valid for DSM China.

To a large extent, the result in 2014 can be explained by a shift in DSM's portfolio of reporting units in 2014. Units of DSM Sinochem Pharmaceuticals were phased out of the statistics, while units of newly acquired companies currently being integrated into DSM China thus took up a larger portion. Although these newly acquired units have already improved their safety records, they are not yet at the level of those sites that have belonged to DSM for a longer time; it takes longer than just a few months to completely adhere to DSM's rigorous worldwide approach to Safety, Health and Environment. For example, in DSM China more than 56 percent of recordable injuries occurred in sites that have been part of DSM for less than four years.

No fatalities occurred in 2014, which means that DSM China has been fatality-free for thirteen years in a row. Nevertheless, the incidents that did occur and the severity of their consequences remain a cause for concern for the company. It is our goal to reduce the number of serious incidents by at least 65 percent till 2020 compared to 2010 when there were 15 such incidents. In 2014 there were one such incident reported in DSM China. The weaker SHE performance in 2014 has led to an even stronger focus on achieving this target. One important step has been the introduction of DSM's Life Saving Rules to China in 2012 which resulted in a significant improvement in safety performance in recent years. Moreover, DSM China introduced the company's Serious Injury and Fatalities (SIF) concept in 2014. This concept identifies and analyzes all past incidents and near misses with the potential for severe injury, so that improvement efforts can be concentrated on the prevention of such incidents. After the pilot phase in 2014, the policy is expected to be fully rolled out in 2015.

Safety Performance (2014)	DSM China	DSM Global	Target (2010-2020)	Realization of China (2010-2014)
TRI-all (Total Recordable Injury)	0.17	0.47	-TRI all < 0.25 -50% reduction	-TRI all achieved - 32% reduction

DSM has also introduced mandatory procedures called ‘lock out, tag out and try out’, as well as ‘confined space entry’. These practices improved the already existing requirements and led to a renewed focus on the flawless execution of these ‘higher-hazard’ activities. A third mandatory practice on ‘permit-to-work systems’ detailing was developed in 2014 and will be implemented in 2015. This new practice focuses on improving the existing work permit requirements within DSM by fostering better cooperation between DSM and contractors in the execution of work.

Internal reviews and audits conducted by the Corporate Operational Audit (COA) showed that the introduction of these procedures reduced the number of incidents. Another initiative to be introduced at all DSM sites in 2015 is an improved Last Minute Risk Assessment (LMRA) methodology currently applied in the Netherlands. The LMRA is the final check to see whether a job is safe to start and everybody knows what to do.

SHE integration of new sites

In recent years, DSM China has acquired a number of new companies with sites located in Greater China. It is a high priority for the company that they implement the worldwide DSM approach to SHE as quickly as possible, as part of the integration process. To this end, DSM China launched a program naming 10 Greater China safety critical procedures which need to be implemented first by newly acquired sites in order to support those sites to get onboard quickly. To verify the implementation, DSM has set up a cross-site review program that monitors progress.

Process safety

The priority of process safety for 2014 is to further develop the competence levels, from junior to senior. Based on the traditional process safety roles in the industry, DSM China initiated the process safety competence development plan with aim to better support the operation sites to organize

process safety risk assessment and to manage the risk mitigation. As a starting point, DSM China enacted a set of new process safety roles, categorized them to different maturity levels and set detailed criteria to certify each role at region level. Building on that, a China level process safety competence development plan was rolled out at the beginning of 2014. The structured training and daily on-the-job coaching resulted in a 50% increase of the qualified persons for process safety competence by the end of 2014.

SHE Competence development

The competence development program also extends to SHE as a whole. A multi-year China SHE competence plan was developed in 2014 as well following the process safety, aiming to develop qualified SHE expertise under those existing SHE roles but in a more structured way. Roles like incident investigation and health risk assessment were identified and detailed criteria for qualification was set accordingly. Then candidates were enrolled in the program and development plan was made and monitored at regular base. By end of 2014, over 40 persons from different sites were certified and started to take the functional role at their sites.

SHE leadership development

DSM continuously focuses on the development of leadership skills in SHE because DSM believes a strong leadership is key to every success. In order to further develop this idea, DSM China has expanded its traditional SHE leadership training and the SHE leadership course for experienced managers (SHELEX) training to a broader base of employees, now including the shop floor as well. For example, the company organized two training sessions for line supervisors in 2014.

Milestones on the path towards an injury-free workplace

In 2014, nine DSM sites have achieved milestones on their way towards creating an injury-free working environment.

Recordable Injury free days	Site
3000	DSM Nutritional Products Animal Nutrition & Health Premix Shandong site DSM Resins & Functional Materials Kunshan site
2000	DSM Nutritional Products Animal Nutrition & Health Premix Hunan site DSM AGI Dayuan site
1000	DSM Nutritional Products Animal Nutrition & Health Premix Changchun site DSM Nutritional Products Animal Nutrition & Health Premix Sichuan site DSM Resins & Functional Materials Pingtung site DSM Engineering Plastics Jiangyin site DSM Engineering Plastics Tai-Young Nylon Co., Ltd.



DSM Kunshan site celebrated 3000 days LWC (Lost Workday Case) free

DSM global SHE recognition

Two sites in China won the DSM global level SHE recognition in 2014.

DSM Engineering Plastics (DEP) Jiangyin site won the 2014 DSM SHE Award which is to honor the site with best SHE performance worldwide. As a matter of fact, DEP Jiangyin site has achieved 15 consecutive years LWC (Lost Workday Case) free and 5 consecutive years Recordable Injury free by the end of 2014. Another exemplary case is that DEP Jiangyin site is encouraging its employees to take the SHE knowledge they learned on the job back to home and influence the family SHE awareness by mitigating household SHE risks and promoting more SHE lifestyles.



DEP Jiangyin site won the DSM global level SHE recognition

DSM Animal Nutrition & Health (ANH) China received another global SHE award, the DSM SHE recognition award, which is a recognition for the special SHE event organized in 2014. For example, it broadcasted its SHE management practice to customers to improve their SHE performance and over 1000 customer employees were trained by DSM SHE professionals by the end of 2014.



ANH China won DSM global SHE special award

SHE behavior workshop at DSM Resins & Functional Materials (DRF) Kunshan site

In 2014, the DRF Kunshan site organized three rounds of DSM SHE Behavior workshops attended by all employees. They discussed the steps on the site's journey towards an injury-free work environment. The workshop placed particular emphasis on the critical role every individual is playing along this journey towards injury free.

Occupational Health

Eliminating occupational health risks is essential to DSM's strategy on employee care. At the same time, DSM constantly promotes a healthy life style.

To address employee's health, all aspects of the DSM Global Health Management are included in the campaigns:

- Prevention (industrial hygiene, ergonomics, mental health);
- Making our brand promise more tangible for employees (health promotion/vitality).

To make the concept of “Bright Science, Brighter living” tangible for employees by:

- prevent all work-related disabilities or health problems;
- driving ‘Healthy’ Business through creating a culture of health.

Industrial Hygiene

DSM China continuously works to identify and abate occupational health risks to ensure healthy working conditions by managing industrial hygiene at all sites, includes office buildings.

Asbestos removal at DNCC

In 2014, DSM Nanjing Chemical Company (DNCC) successfully finished its asbestos removal project. The program, started in 2011, aimed to identify and clean all materials containing asbestos in a safe way. To achieve this, DNCC worked together with a professional cleaning provider, AECOM. Both partners made a multi-year plan on the cleanup and how to avoid new applications of asbestos-containing material.

Replacing manual operation at ANH Premix site

Packaging was done manually at Animal Nutrition & Health (ANH) Premix Liaocheng site. This work was physically demanding and also posed ergonomic risks to the workers. To eliminate these risks, the operation was successfully automated and the packaging workers were then transferred to other operations. This started a new trend in the whole industry.



Packaging work done by Robert in ANH Premix site

Health promotion/Vitality

One element of DSM's health promotion policy is its vitality program, Vitality@DSM, which is aiming to take care lifestyle issues. To boost participation DSM China organized online checks in more sites and deployed various activities based on 4 pillars of vitality: nutrition, exercise, mindset and recovery. The online check program was extended to a further eight sites with over 800 employees in 2014.

Vitality promotion at DSM Beijing office



Work-break exercises in Beijing office

To help people care about their health and to create a healthy work style, DSM's Beijing office has provided additional exercise equipment to its employees and organized a series of health-related activities in 2014. These are:

- Installation of billiard tables for recreation during breaks and massage chairs in the office;
- Morning eye exercises and work-break exercises in the afternoon, which drive colleagues to avoid sitting too much and to take regular breaks;
- Promotion of health knowledge via seminars.

Planet in 2014

DSM recognizes the environmental impact of its business operations and is committed to taking comprehensive measures to protect the planet for future generations. Within the Planet dimension of its Triple P (People, Planet and Profit) approach, DSM actively works on creating solutions and innovations that improve the environmental footprint of its business and that of its external stakeholders in its value chains.

Environmental impact of DSM's operations

Targets & achievements in China

Within the framework of its corporate strategy, DSM has defined Safety, Health and Environment (SHE) targets for the period of 2010-2015 which include eco-efficiency targets. A Corporate Multi-year Plan Responsible Care (CMP) contains the measures and activities through which these objectives are to be achieved. The CMP also provides guidance on how to roll out three-year plans for each business group.

All environmental targets (except the target for greenhouse-gas emissions) are relative targets. This means that increases or decreases result from calculations take changes in production volumes into account. Acquisitions and divestments in the target period are excluded in order to create like-for-like comparisons with the reference year.

The tables in this chapter show absolute totals for the year 2014 and the degree of target realization by DSM China. Till the end of 2014, the major environmental CMP targets, such as COD, SO₂ and NOx emissions were realized, which means these goals were reached ahead of schedule.

Key Environment Indicators	China ¹ 2014	DSM Global 2014	CMP Target (2010-2015)	Realization of China (2008/2010-2014) ²
Energy use in tarajoules (TJ) ³	8,970	39,149	20%(2008-2020)	33.77%
SO ₂ (tons)	9	82	70%	99.85%
VOC (tons)	1,750	4,170	40%	25.76%
NOx (tons)	136	1,520	30%	93.46%
GHG (2008-2020) (tons)	916,700	4,158,260	25% (2020)	-18%
COD (tons)	46	3,880	20%	25%
Water Intake (excl. OTC) (1000 m ³)	5,800	117,600	15%	49.64%
Landfilling Non-hazardous Waste (tons)	60	18,250	15%	-57.68% ⁴

¹ The data exclude all DSM Sinochem Pharmaceuticals (DSP) sites since 2014. DSP, a joint venture with Sinochem, was deconsolidated following new accounting rules for joint ventures.

² Corrected for changes in production volumes and product portfolio relative to the reference year (except for GHG which is absolute value).

³ Energy use data include all the five sites in Taiwan.

⁴ The data will be elaborated specifically in the following pages.

Energy Consumption

In 2014, DSM China's total energy consumption increased from 8590 terajoule (TJ) in 2013 to 8970 TJ. The increase comes from the running of the line 2 project in DSM Nanjing Chemical Company (DNCC), which consumes more energy than the phased-out DSM Sinochem Pharmaceuticals (DSP) sites. At the meantime, however, energy efficiency of DSM China improved by 8.5%, it is a big step forward from previous years.

The improvement rely on application of best available techniques, the awareness and initiatives at all China sites.

DNCC is the biggest site in DSM China, lots of energy saving technologies were adopted in DNCC line 2 project, which is the biggest contribution for energy efficiency improvement in DSM China. In particular, two of these new technologies, the ammonia combustion process and benzene evaporation column can save steam about 400,000 tons per year totally. Apart from line 2, the plant continuously optimizes current process, the overall steam pipe network has been optimized to improve the utilization of low-low-pressure steam, saving steam 50,000 tons per year.

DSM Kunshan site is currently implementing an energy and emission improvement program based on DSM's objectives for 2020. As part of the program, the site implemented six sigma improvement initiatives for energy saving, upgraded its off-gas tank pressure control system and reduced its hazardous waste. This led to new record lows of only 0.18 kg of hazardous waste per ton Finished Product and 3.37 GJ energy consumption per ton Finished Product.

Meanwhile, DSM Engineering Plastics (DEP) Jiangyin site conducted an energy mapping project for its Compounding Plant during which it identified new measuring points where it installed energy meters. After setting up the system, DEP Jiangyin site started weekly energy measurements which was later increased to daily energy monitoring. In 2014, the site also started to replace normal lightings with LED step by step. This resulted in yearly savings of energy needed for lighting. This also means that DEP Jiangyin site can save 46 tons of coal and eliminate 116 tons of CO₂ emissions per year.

Emissions to air

Emissions of Volatile Organic Compounds (VOC) decreased from 2,350 tons in 2013 to 1,750 tons in 2014. The major contribution came from abatement campaigns at the DSM Laiwu site and the removal of DSM Sinochem Pharmaceuticals (DSP) sites.

Emissions of nitrogen oxide (NO_x) decreased from 231 tons in 2013 to 135.9 tons in 2014, most of which was due to removal of DSP from the reporting units.

Emissions of sulfur dioxide (SO₂) decreased rapidly from 93 tons in 2013 to 9.39 tons in 2014 owing to the exclusion of DSP sites in reporting system.

DSM China's total greenhouse gas emissions (direct and indirect) increased from 734,000 tons of CO₂ equivalent in 2013 to 916,697.04 tons in 2014. This increase is due to the increase of the total production volume in 2014 and the temporary shutdown of N₂O abatement installations at DNCC because of unexpected technology barriers.

Discharge to water and landfill

The discharge of Chemical Oxygen Demand (COD), which is an indicator of wastewater pollution by organic substances, was reduced from 159 tons in 2013 to 46 tons in 2014. This was mainly due to the removal of DSP from reporting units.

The discharge of non-hazardous waste to landfill sites sharply decreased from 5,414 tons in 2013 to 60 tons in 2014 due to the removal of DSP from reporting units.

Water use

DSM continuously strives to minimize the adverse effect its operations may have on the quality and quantity of water available in the regions where it operates.

DSM's global water use is divided into surface water, groundwater and potable (tap) water. Total water use by DSM China decreased from 6.2 million m³ in 2013 to 5.8 million m³ in 2014 due to the removal of DSP and water use efficiency improvement.

Advanced air purifying system at DSM Bazhou site

In 2014, the Animal Nutrition & Health (ANH) R&D center at DSM's Bazhou site installed an advanced air cleaning system, 'MagixX', to purify the air emitted from animal houses through a natural process. The system relies on three layers consisting of different types of natural materials acting as filters to clean the air. This system effectively removes air pollutants like ammonia gas, dust and odors in an environmentally friendly fashion.

VOC reduction at DSM Laiwu site

To reduce the emissions of Dichloromethane (DCM), DSM Laiwu site initiated a project in 2014 to reduce DCM consumption by increasing recycling and reducing fugitive emissions during the production process.

SO₂ reduction at DSM AGI site

By replacing the Heavy Oil with Light Pyrolysis Oil (LPO) for steam boiler, the DSM-AGI Xinhua site reduced particulate matters emissions by 46% and SO_x emissions by 51%.

Recycling activity at DRF Pingtung site

To increase employees' awareness of recycling in a relaxed way, the DSM Resins & Functional Materials (DRF) Pingtung site organized volunteers to conduct some recycling work at an external waste recycle station.



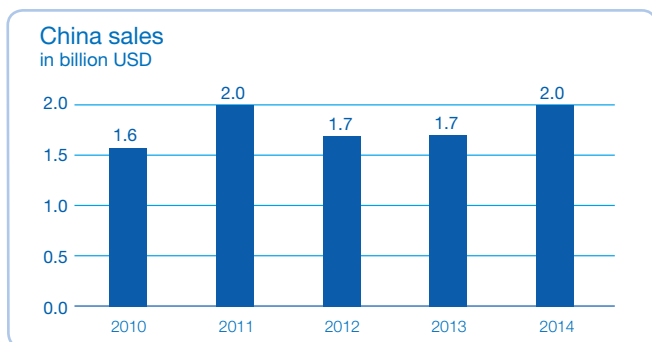
Recycling activity organized by DRF Pingtung site

Water saving promotion at DSM Laiwu site

To increase water saving awareness, DSM Laiwu site organized a promotion and information activity on March 22nd, the World Water Day.

Profit in 2014

Sales in China continued to represent an important contribution to DSM's total sales in high growth economies. In 2014, Sales in China reached USD 2.0 billion, compared to USD 1.7 billion in 2013.



New acquisitions and facilities in China in 2014

New Food Specialties enzyme facility in Jiangsu

In Yixing, Jiangsu Province, DSM launched a new enzyme facility run by DSM (Jiangsu) Biological Technology Co., Ltd. The new plant has been built according to world leading quality standards and management systems. As one of DSM Food Specialties enzyme solutions manufacturing sites, it serves both global and local markets.



Ribbon-cut ceremony of the world-class enzyme facility

DSM acquired Aland (HK) Holding Limited, a leading Chinese Vitamin C manufacturer. This acquisition allows DSM to further strengthen its position in the market for vitamin C in China. The Aland takeover also increases DSM's global footprint in vitamins for Human Nutrition & Health, Animal Nutrition & Health and Personal Care.



Signing ceremony of DSM and Aland (HK) Holding Limited

External recognitions in 2014

Various DSM sites across China are being recognized for their exemplary work in sustainability, for example in the field of Safety, Health and the Environment. Local DSM units are being recognized by their host governments as models for safety, innovation or environmental protection. Listed below are the awards received by DSM in China.

Product/Innovation Award

- Oatwell™ oat beta glucan is a soluble fiber found in oats. Oatwell™ helps lower cholesterol and the associated risk of cardiovascular disease. DSM received the Ringier Technology Innovation Awards 2014 Food & Beverage Industry in June 2014
- Andre Pectin of DSM Hydrocolloids has been awarded Outstanding Enterprise in Microbiome (intestinal health) of China
- DSM Uralac® Superdurable Resin received “The Supreme Award” from China Construction Metal Structure Association

Sustainability and Corporate Social Responsibility Award

- DSM (China) Ltd. was among the China Top 100 Green Companies List in 2014 initiated by the China Entrepreneur Club
- DSM (China) Ltd. received the Outstanding Contribution Award for Project Hope by China Youth Development Foundation
- DSM (China) Ltd. received the Loving Heart Company Award by China Foundation for Poverty Alleviation
- DSM (China) Ltd. was recognized as 2014 the best Corporate Social Responsibility (CSR) practice of foreign-investment enterprises in China by China Association of Enterprises with Foreign Investment

Safety, Health and Environment Awards

- DSM Nanjing Chemical Company received the Blue Grade certification for its environmental performance by the Jiangsu provincial Environmental Protection Bureau.
- DSM Nanjing Chemical Company was recognized as “Four Excellent capabilities for Enterprise Firefighting Management” by the Nanjing Public Security and Firefighting Bureau.
- DSM Nanjing Chemical Company was honored for its “Excellent Performance for Enterprise Security Management” by the Nanjing Public Security Bureau.

- DSM Engineering Plastics (Jiangsu) Co., Ltd. was awarded as “Advanced Group for Promoting Eco-Civilization and Environment Protection” by the Jiangyin municipal government.
- DSM Engineering Plastics (Jiangsu) Co., Ltd. was honored as an “Outstanding Enterprise of Energy Saving and Efficiency Improvement” and “Outstanding Enterprise in Operations Safety” by the Jiangyin Hi-tech Industrial Development Zone.
- DSM Vitamins (Shanghai) Co., Ltd. was rewarded as an “Outstanding Enterprise in Operations Safety” by the Fengxian municipal government.
- DSM Vitamins (Sichuan) Co., Ltd. was recognized as an “Outstanding Enterprise in Operations Safety” by the Chengdu municipal government.
- DSM Eternal Resins (Kunshan) Co., Ltd. was recognized as Green Enterprise by the Kunshan Environmental Protection Bureau.
- DSM Syntech Synthetic Resins (Foshan) Co., Ltd. was honored as “Outstanding Enterprise in Operations Safety and Firefighting Management” by the Foshan municipal government.
- Shandong ICD High Performance Fibres Co., Ltd. was honored as “Outstanding Enterprise in Firefighting Management” in the Laiwu Hi-tech.
- Zhejiang DSM Zhongken Biotechnology Co., Ltd. was rewarded for its excellent management in handling hazardous chemicals by the Tongxiang municipal government.
- Zhejiang DSM Zhongken Biotechnology Co., Ltd. was rated as “Clean Production Company” by the Tongxiang Environmental Protection Bureau.
- Zhejiang DSM Zhongken Biotechnology Co., Ltd. was Runner-Up in the local firefighting contest in the city of Tongxiang.
- Three DSM-AGI sites - Zhangbin, Dayuan and Xinhua were rewarded by the respective local governments for their contribution to joint emergency response drills.

Other Government Awards to the Company

- DSM Eternal Resins (Kunshan) Co.,Ltd. was recognized as Software Authentication Model Enterprise by the Kunshan municipal government.

Government Awards to DSM employees

- Mr. Li Bin, SHE engineer of DSM Nanjing Chemical Company, was honored as “Excellent Individual Contributor to Operation Safety” by the Nanjing municipal government.
- Mr. Shen Jianchun, SHE officer of DSM Vitamins (Shanghai) Co., Ltd., was honored as “Excellent Individual Contributor to Operation Safety” by the Fengxian municipal government.
- Mr. Wei Honggang, SHE engineer of Shandong ICD High Performance Fibres Co., Ltd., was honored as “Excellent Individual Contributor to Operation Safety” by the Laiwu municipal government.

What still went wrong in China 2014

Although DSM strives to improve its performance in all areas of its operations, sometimes things can still go wrong.

This chapter summarizes the most important incidents in 2014, across the three dimensions of People, Planet and Profit.

DSM endeavors to remedy the outcome of unwanted incidents and prevent them from recurring. To this end, it investigates the root causes of any occurrence and takes steps to communicate appropriate measures.

Where necessary, DSM applies consequence management to individual employees based on its Code of Business Conduct. DSM does not disclose any personal details in cases involving individuals.

In line with its reporting policy on safety, health and environment, DSM includes some serious near misses within this overview. These are incidents that did not result in injury, illness or damage, but had the potential to do so, and are therefore used as a learning opportunity.

People

- At DSM Nanjing Chemical Company, one employee fell down a staircase and hurt his wrist when hitting the ground.
- At DSM Vitamins (Shanghai) Co., Ltd., an operator hurt his finger when trying to push aside bamboo leaves extending into the sidewalk area.
- At DSM Syntech Synthetic Resins (Foshan) Co., Ltd., one contractor worker squeezed his left index finger while piling up empty drums used for recycling on a carriage.

- At Shandong ICD High Performance Fibres Co., Ltd., one employee hurt his eye with the metal scrap spatter. He needed an operation to repair the wounds and recover.
- At Zhejiang DSM Zhongken Biotechnology Co., Ltd., a contractor worker injured his face and damaged one tooth while drilling a hole into a wall in preparation for installing a pipe tripod.
- At DSM (Jiangsu) Biotechnology Co., Ltd., one operator injured his left hand when he accidentally opened a metal pipe while hooking pipes up for cleaning.

Planet

- At DSM Nanjing Chemical Company, a neighbor resident complained the noise caused by the operation of the production line, but the monitoring by local Environmental Protection Bureau (EPB) showed that noise level complied with China emission standards. Nevertheless, a noise mitigation project was being executed in 2014 to further reduce the noise level.
- DSM Vitamins (Shanghai) Co., Ltd. was fined by local EPB due to the shutdown of the press-filter for sludge treatment in waste water treatment plant without an official notification to the local EPB ahead of schedule.

Profit

- At DSM Nanjing Chemical Company, a shortage in the supply of critical raw materials caused lower production volumes.

Explanation of some concepts and ratios

PEOPLE

FI

Frequency Index: 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: $LWC\text{-rate} = 100 * (\text{number of LWCs (past 12 months)} / \text{average effective manpower (past 12 months)})$.

People+

DSM's People+ strategy will deliver measurably better solutions to improve the lives of people. The company has defined a new People+ framework based on broad stakeholder analyses. The dimensions of health, comfort and well-being, working conditions and community development have been identified as distinct and instrumental categories to measure People+ impact at product level. Based upon the stakeholder input DSM has designed a measurement tool, which will be further developed in collaboration with The Sustainability Consortium, customers and other stakeholders.

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.

Zero SHE assessment

A zero SHE assessment is a step in the integration process of newly acquired units or new joint ventures. A team led by a corporate SHE manager visits the unit and identifies and assesses the main SHE risks and compliance gaps with the DSM corporate requirements, standards and practices. The team provides recommendations to minimize and control these risks and also identifies good practices that can be of use in other DSM units. During the zero SHE assessment the team elucidates the DSM SHE requirements and supports the unit in formulating and prioritizing the actions in the SHE integration and compliance plan.

PLANET

Biofuel

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

Carbon footprint

The 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.

Cradle to Cradle®

A holistic economic, industrial and social framework that seeks to create solutions that are not only eco-efficient but also essentially waste free throughout their lifecycle.

Chemical Oxygen Demand (COD)

COD is an indicator of the degree of pollution of wastewater by organic substances.

ECO+

ECO+ solutions are products and services that, when considered over their whole life cycle, offer clear ecological benefits (in other words, a clearly lower eco-footprint) compared to the mainstream solutions they compete with. These ecological benefits can be created at any stage of the product life cycle – from raw material through manufacturing and use to potential reuse and end-of-life disposal. ECO+ solutions, in short, create more value with less environmental impact. The qualification ECO+ is based upon internal expert opinions where various impact categories are evaluated. For a growing number of products these expert opinions are supported by Life Cycle Assessments.

Eco-efficiency

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

Greenhouse-gas emissions (GHGE) reduction over volume related revenue (VRR)

The GHGE definition is according to the Kyoto Protocol and includes carbon dioxide (CO₂), methane, nitrous oxide (N₂O), sulfur hexafluoride, hydrofluoro carbons and perfluoro carbons. VRR is net sales adjusted for changes in selling prices, exchange rates and the impact of acquisitions and

divestments. GHGE/VRR is one of the ratios in the Long-Term Incentive part of the Managing Board remuneration and relates to a three-year period.

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

General

In calculating financial profitability ratios, use is made of the average of the opening and closing values of balance sheet items in the year under review. The financial indicators per ordinary share are calculated on the basis of the average number of ordinary shares outstanding (average daily number). In calculating Shareholders' equity per ordinary share, however, the number of shares outstanding at year-end is used. In calculating the figures per ordinary share and the 'net profit as a percentage of average Shareholders' equity available to holders of ordinary shares', the amounts available to the holders of cumulative preference shares are deducted from the profits and from Shareholders' equity.

Capital employed

The total of the carrying amount of intangible assets and property, plant and equipment, inventories, trade receivables and other receivables, less trade payables and other current liabilities.

Capital expenditure

This includes all investments in intangible assets and property, plant and equipment as well as the acquisition of subsidiaries and associates and related cash flows.

Cash flow

Cash flow is net profit plus depreciation, amortization and impairments.

Core earnings

Core earnings represent profit or loss from continuing operations excluding exceptional items and excluding amortization of intangible assets recognized from the application of purchase accounting for business combinations.

Disposals

This includes the disposal of intangible assets and property, plant and equipment as well as the disposal of participating interests and other securities.

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

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

Earnings per ordinary share

Net profit attributable to equity holders of Koninklijke DSM N.V. minus dividend on cumulative preference shares, divided by the average number of ordinary shares outstanding.

Operating working capital

The total of inventories and trade receivables, less trade payables.

Return on capital employed (ROCE)

Operating profit as a percentage of weighted average capital employed.

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