

Perstorp 2015

SUSTAINABILITY REPORT

Sustainability report

The two greatest threats to our world are indifference and the misplaced confidence that someone else will save it. Not us, though. At Perstorp, we take our role and our commitment to sustainability very seriously. We bring our core value of responsibility – encompassing respect for the environment, the rights of people, and ethical behavior and transparency – to every aspect of our business, everywhere we do business.

We do this by taking initiatives that reduce carbon emissions, shrink our energy footprint, minimize waste, reduce water usage and improve occupational health and safety in our organization.

We know that the actions we take today, in every aspect of our business, affect future generations. This responsibility to the future guides everything we do.

In 2015, based on a thorough materiality assessment, we developed a new indicator to show how our products and solutions stand from a sustainability perspective. This Sustainability Index, a total lifecycle impact measurement, will be available for customers to use and benchmark.

We have renewed our commitment to the UN Global Compact, supporting the initiative and the 17 new Sustainable Development goals, along with its ten principles on human rights, the environment, the working environment and anti-corruption. We continue to work step by step towards making the world a better place through our business endeavors.

MANAGEMENT SYSTEM

In 2015, the Group had ten production units in eight countries. The largest production sites in the Group are located in Sweden. The Perstorp Group has a multisite certificate according to the ISO 14001 standard, which covers seven of the ten production units. The production unit in Warrington, UK is certified in accordance with OHSAS 18001. The production units in Perstorp, Sweden and Bruchhausen, Germany are certified in accordance with ISO 50001.

HEALTH & SAFETY AT WORK

OSHA-recordable injury rate (OSHAR) is a measure of the outcome of our safety and health initiatives. All injuries are recorded and aggregated for the company; injuries to anyone working on a Perstorp site, whether he or she is an internal employee or a contractor. Those incidents involving lost time or any medical treatment beyond first aid are used to calculate the OSHAR, by multiplying the number of injuries by 200,000 and then dividing that number by actual hours worked.

SAFETY PERFORMANCE

YEAR	2014	2015	(goal)	(goal)
			2016	2017
OSHAR	1.5	1.1	0.8	0.4

ENVIRONMENTAL PERFORMANCE

Our target for environment during 2015 was to reduce both emissions and the environmental footprint compared with 2014. We selected three environmental key indicators to monitor how we succeeded in this objective:

KPI	2012	2013	2014	2015
Energy consumption MWh/ton of product	1.40	1.34	1.32	1.45
Emissions of fossil-related ton CO ₂ /ton of product	0.21	0.21	0.19	0.19
Amount of pollution (kg COD) in wastewater/ton of product	4.4	4.6	4.9	3.8

Energy consumption/ton of product was up in 2015, largely due to reduced production speed and a shutdown related to severe supply disruptions. Emission of fossil carbon dioxide was essentially stable. The amount of pollution in wastewater prior to treatment decreased substantially. Going forward, we are developing new targets and KPIs based on the Sustainability Index.

RESOURCES MANAGEMENT 2015 (2014)

ENERGY

- Total energy use: 2,321 (2,108) GWh
- Total energy intensity: 1.45 (1.32) MWh per ton product

Our Perstorp, Sweden production site produced 688 (689) GWh of energy, of which 259 (249) GWh – 38% (36%) – consisted of energy from renewable fuels. Our Swedish production units supplied district heating to their respective municipalities, as well as steam to other companies within Perstorp Industrial Park at our site. A total of 170 (174) GWh was supplied.

Of the company's self-produced energy, 14% (15%) came from renewable fuel.

RAW MATERIALS & AUXILIARY CHEMICALS

- Total consumption of raw materials: 2009 (1897) kton

We use a large volume of chemical raw materials like methanol, propylene and natural gas in our processes. These are refined into products, some of which – such as formaldehyde and butyraldehyde – constitute important ingredients further down in our processing chain.

As a Group, we seek to deliver as much as possible in bulk so that we cut down on the amount of packaging material we use.

WATER

- Total water consumption: 21.7 (19.6) Mm³

Of total consumption, 17.0 (14.8) Mm³ was surface water, 3.6 (3.8) Mm³ groundwater, 0.7 (0.7) Mm³ municipal supply and 0.3 (0.2) Mm³ supply from other external sources. Of the total volume, about 18 (16) Mm³ was used as cooling water with thermal change as the sole impact.

COSTS OF ENVIRONMENTAL, HEALTH AND SAFETY WORK & INVESTMENTS 2015 (2014)

ENVIRONMENTAL & WORKING ENVIRONMENT COSTS

In 2015, the Group's environmental and working environment-related costs amounted to SEK 75.8 (81.9) million, corresponding to 0.7 (0.7) percent of net sales.

Of this total amount, costs for waste disposal amounted to SEK 11.9 (13.4) million. During the year, the Group spent approximately SEK 26.4 (27.1) million on wastewater treatment and around SEK 28.1 (32.7) million on environmental administration.

These administrative costs included costs for environmental staff, maintenance of environmental management systems and external consultancy.

INVESTMENTS IN ENVIRONMENT, HEALTH & SAFETY

Total capital investments in the environment, health and safety areas amounted to SEK 39.6 (54.3) million. This amounted to 6.0 (6.5) percent of the Group's total investments.

The organization invested over 17,500 person-hours in EHS training in 2015, distributed as follows:

- Safety and fire prevention 8.8 hours per person
- Working conditions 5.6 hours per person
- Environmental control 4.5 hours per person

IMPACT & EMISSIONS 2015 (2014)

EMISSIONS OF GREENHOUSE GASES

- Total Greenhouse Gas emissions: 410 (399) kton CO₂ equivalent
 - Scope 1 = 354 kton CO₂ equivalent
 - CO₂ from renewable fuels: 106 (95) kton
 - Other greenhouse gases (N₂O, CFCs): 1.9 (2.7) kton CO₂ equivalent
 - Scope 2 = 56 kton CO₂ equivalent

A significant part of our climate impact was caused by direct emissions (Scope 1) of carbon dioxide from burning fossil fuels, and indirectly (scope 2) through the consumption of purchased electricity and steam.

EMISSIONS OF OZONE-DEPLETING SUBSTANCES

The total quantity of ozone-depleting substances in use in the company's operations was 3.0 (2.1) tons. Of this amount, 0.17 (0.30) tons escaped into the atmosphere.

OTHER AIR EMISSIONS

- VOC: 187 (140) tons
- Sulphur dioxide: 6 (6) tons
- Nitrogen oxides: 161 (158) tons

Our emissions of volatile hydrocarbons (VOC) were process-related and the major specific substances were dimethyl ether, propylene and methanol.

Our emissions of sulphur dioxide and nitrogen oxides came primarily from the Group's power plants.

WASTE

- Total waste: 54 (53) kton
- Hazardous waste: 42 (41) kton
- Non-hazardous waste: 12 (12) kton
- Total amount of waste per ton of product: 34 (33) kg/ton of product
- Total amount of waste per ton of product put to landfill: 4.5 (5.4) kg/ton of product

Certain waste was recycled internally for energy recovery within the Group. For example, 7,460 (6,330) tons of return methanol at our site, 18,600 (15,975) tons of reaction mother lye at site Perstorp and distillation residues at site Warrington amounting to 2,335 (2,860) tons. By recycling these streams as an energy source, the need for additional fossil fuels was reduced.

WATERBORNE POLLUTANTS

- COD before treatment: 6,040 (7,800) tons

In October, site Stenungsund became aware of a spill of Biodiesel and an alcohol into Skedhammarsbäcken, a nearby creek. This spill was the subject of a media report and understandable concern from the local community. Perstorp Oxo AB is taking corrective action and working with local authorities to address this situation.





SUSTAINABLE DEVELOPMENT

We continue to conduct lifecycle assessments (LCAs) for our existing and emerging products, including independent verification by third parties, most notably SP Technical Research Institute of Sweden. Lifecycle assessments are a systematic approach to measuring emissions and impact at each step in the production chain – from the extractions of the raw material, processing, energy use and transports to the production of the final product.

We are currently implementing a measurement of environmental and social impact we call the Sustainability Index. Using this index, and the detailed data it generates, we can guide our products and their applications towards improved impact throughout the supply chain. We take service life and ultimate fate of the end use into consideration as we score downstream applications of our products according to how well they fit into circular economy. The data from this metric will guide all of our decisions moving forward. Our goal for 2016 is to have 60% of our material products evaluated, with more to come in 2017.

SUPPLY CHAIN

In 2015, we continued our focus on supply chain, including efforts to reduce our environmental impact by maximizing transport efficiency, increasing the use of recycled materials, recycling used packaging and reusing pallets. We began a pilot project in the US to reduce the consumption of polypropylene used in our packaging. This project has the potential to eliminate over 10 tons of fossil-fuel based plastic from our supply chain annually.

We are a member of the board and a driving force within The Clean Shipping Index. We also support the Network for Transport and Environment (NTM) working group.

SOCIAL DIALOGUE

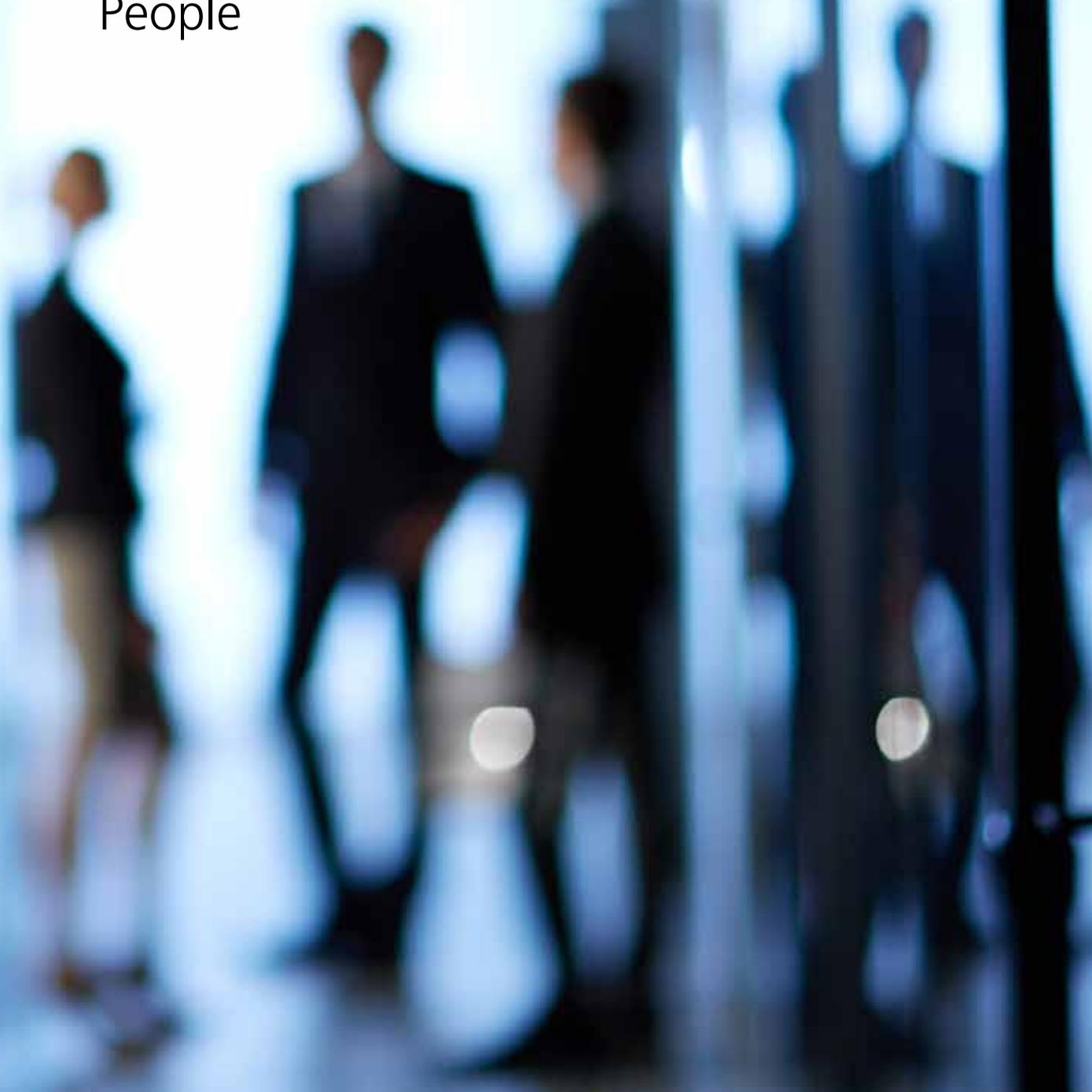
Our site in Warrington, UK, was recognized for operational excellence by Chemicals Northwest (part of the UK Chemical Industries Association) in 2015. The criteria for winning was “the company whose successful practices have seen an improvement in the efficiency and productivity of a chemical manufacturing process.” The judges were very impressed with how the site has worked with process improvement methodologies in cross-functional teams and how they have shown progress in areas including safety performance. Warrington was also among less than 20% of UK companies that met the 2015 deadline to develop plans for an Energy Savings Opportunity Scheme (ESOS).



We haven't chosen the easy way.
We've chosen the right way.
Because nothing can be counted
a success if it causes harm.



People



THE PMD PROCESS

PMD, People Management & Development, is our process for assessing and developing performance for all employees. The process also involves planning of training and other development activities as well as long-term career planning. The PMD discussions are structured parts of the continuous process between all managers and the people reporting to them. The company's Performance Management is built on our core values: Focused Innovation, Reliability and Responsibility. In PMD, we break down these values to individual behaviors that are natural discussion points during the bi-annual PMD discussions between each employee and his or her manager.

VALUES	BEHAVIORS
Focused innovation	BUSINESS & RESULTS ORIENTATION
	Sharing the vision – Acts in a way that aligns activities towards the achievement of the vision, and is company-oriented rather than self-oriented.
	Goal orientation – All actions are clearly linked back to the achievement of target and goals with high sense of urgency.
	Driving for results – Will not compromise on expectations. Executes on agreed plans, takes corrective actions when required, and is deadline and outcome-focused.
	Challenges – Challenges assumptions, ideas and approaches to ensure quality and relevance. Remains constructive and does not create conflict. Prepared to challenge people in more senior positions.
Reliability	Market knowledge & customer orientation – Places customers at the center of all activities. Works to understand their needs and pro-actively develop solutions to meet them.
	ORGANIZATIONAL ORIENTATION
	Ownership – Takes ownership of goals at individual and team level. Takes accountability for outcomes, delivers on our promises.
Responsibility	Communication – Is clear and concise both verbally and written. Tailors communication to the recipient/group and follows up to ensure understanding.
	Review – Processes in place to review, remove risk and drive progress towards achieving committed results. Takes timely corrective action aimed at a sustainable result. Installs processes to ensure continuous improvement.
	PEOPLE & LEADERSHIP ORIENTATION
Responsibility	Leading self – Acts with integrity, respect and compliance. Earns trust by demonstrating the Perstorp behaviors – Role Model. Takes responsibility for own development.
	Leading others – Provides a safe working environment in accordance with Perstorp Responsible Care. Ensures that accountability and responsibility is given, measured and acted upon with clear communication – empowerment. Is firm, fair and consistent in the application of performance standards. Gives regular feedback, recognizing both positive and negative outcomes.

THE EMPLOYEE SURVEY

During 2015, we launched an employee mini-survey. We conduct a larger Employee Survey every second year. However, to check that our activities are running as planned, we decided to implement the mini-survey for the in-between years. The mini-survey only checks the Performance Index (the overall main result) and the Leadership Index, and consists of just 18 questions (compared to 54 questions in the Employee Survey). 90.3% of all employees answered the mini-survey. We had a slightly lower result in Performance Index 2015, with 3.6 compared to 3.7 2014. The Leadership Index was at the same level for 2015 as for 2014, with 3.7. This shows that, as a company, we offer good opportunities for employees to perform well in their day-to-day jobs. The follow-up from the Employee Survey 2014 shows that we identified over 500 improvement actions, of which 300 have now implemented.

PERSTORP ACADEMIES

We continued to run the Process Academy and the Sales Academy during 2015.

In 2016, we are starting up a Leadership Academy to support leaders at different levels in the company as well as new talents coming from our new Talent Management Process (see below).

TALENT MANAGEMENT

In 2015, we launched and implemented a Talent Management Process aligned to the PMD process. We identified talents within the company and, after a nomination process, offered 32 people an assessment measuring both their potential and their readiness to take on new challenges. The assessment also compared our talents with talents from other chemical companies. The results showed that our talents outperformed their peers in the vast majority of the areas measured.

After the assessment and feedback, we set individual development plans. A Leadership Academy will be set up in 2016 to support further development of both new talents and leaders within the company.

PERSTORP GYMNASIUM

The Perstorp Gymnasium is a chemical/technical school founded by the company in 1996 to train and educate 16 to 18-year-olds, and equip them for a technical, vocational career. We enjoy good collaboration with staff and students at the school, and provide the students with opportunities for work experience at our production sites.

In 2016, Perstorp Gymnasium will expand its activities with a new program aiming to educate and train electrician and automation technicians. perstorp-gymnasium.org

In addition, Perstorp participates in university fairs and supports students in writing their theses.

We are Perstorp

We are committed to continuously seeking ways to improve the impact of our own operations. First and foremost, because it's the right thing to do. But also because we believe organizations that put sustainability at the center of their business will be more successful.

We believe sustainable business practices are integral to creating long-term shareholder value. So we count sustainability as an integral pillar of our business strategy.

However, we're not perfect. We have just begun this journey and confess that we have a long way to go. Yet we will prevail. Because our pursuit of sustainability is rooted in optimism, passion and the strong belief that small acts ultimately add up to help transform the world.



Discover Your Winning Formula

Perstorp believes in improving everyday life – making it safer, more convenient, more fun and more environmentally sound for millions of people all over the world. As a trusted world industrial leader, our innovations provide essential properties for products used every day at home and work. You'll find us everywhere from your car and mobile phone to towering wind turbines and the local dairy farm. Simply put, we work to make good products even better.

Perstorp's focused innovation builds on more than 135 years of experience, representing a complete chain of solutions in organic chemistry, process technology and application development. Manufacturing is based in Asia, Europe and North America, with sales and support in all major markets. The Perstorp Group is controlled by funds managed and advised by the European private equity company PAI partners.