

A photograph of a forest with two large, dark tree trunks in the foreground. The background is filled with green foliage and branches, with sunlight filtering through the trees, creating a dappled light effect on the forest floor.

Perstorp 2016

SUSTAINABILITY REPORT

Business value and sustainable development go hand in hand

Four years ago, we began an ambitious transformation of Perstorp towards becoming a truly GREAT company. We've differentiated in how we go to market, making big changes in synchronizing our operative model from production to market reality. At the same time we also introduced the Responsible Care function, the global chemical industry's way to organize important matters such as health, environmental performance, workplace safety and communication with stakeholders about products and processes.

At Perstorp, we take our role and our commitment to sustainability very seriously. We strive at bringing our core value of responsibility to all aspects of our business, everywhere we do business. Aware that the actions we take today will affect future generations. During 2015 and 2016, a high-level analysis was undertaken to determine what dimensions of sustainability are most material to our stakeholders. The output was a strong set of links between our vision as a 21st-century company, the markets we aspire to serve and the United Nations Sustainable Development Goals. This strategic platform will be further developed and serve as our own compass for our future direction and initiatives within this area.

In this context I would like to highlight a few other areas from the past year;

- Based on a total lifecycle impact measurement, Perstorp has developed a metric, the Sustainability Index, to show how our products and solutions stand from a sustainability perspective. This Product Sustainability Index is now being used to evaluate all of our products and determine where we need to focus our sustainability efforts.

- Our performance on the major environmental impacts such as energy consumption, wastewater, GHG and waste showed a continued improvement in 2016 when compared to the two prior years, which means that we have taken many small steps to use resources more efficiently.
- Our safety performance in 2016 sadly saw our KPIs going in the wrong direction, with one fatal accident of a contractor at our production site in Zibo. This is alarming and taken very seriously. Since most incidents have human behavior at their root, we are now rolling out a plan with the focus to make safety the instinctive, everyday habit in all actions. It starts with myself and the Perstorp leadership team and with the aim at reaching 100 % of our tough safety targets for 2017.
- Our Code of Conduct has been updated and translated into nine languages.
- Our overall investments in responsible care initiatives has somewhat increased from 6.0% to 6.7% of our total investments in 2016.

Technological changes are fundamentally transforming everything we do and I believe the chemical industry will change more in the next ten years than it has in the last 50, as we will develop cleaner, safer, smarter and more sustainable chemistry for our customers. For Perstorp, a deep heritage of long-term responsibility and sustainability is the foundation for a thriving business. But it also means acting here and now.

Malmö, May 2017
Jan Secher
President and CEO

SUSTAINABILITY

Perstorp is a group of companies that develop, manufacture and sell specialty chemicals. As such, our environmental, social and economic impacts arise mostly from our raw materials, production facilities and the downstream markets into which our products are applied. Our impacts on the wellbeing and economic prosperity of our own employees, associated partners and the communities in which we operate are also significant factors in measuring our success as a corporate steward. In this report, we explore Perstorp’s impacts in detail, consolidated from the eleven production sites (operating in nine countries) which were owned in part or in total by Perstorp during 2016. These sites are:

- Perstorp, Sweden
- Stenungsund, Sweden
- Nol, Sweden
- Gent, Belgium
- Zibo, China
- Bruchhausen, Germany
- Waspik, The Netherlands
- Fredrikstad, Norway
- Castellanza, Italy
- Warrington, United Kingdom
- Toledo, United States

Fundamentally, Perstorp recognizes that we need a Sustainability strategy in order to remain relevant. During 2015 and 2016, a high-level analysis was undertaken by a cross-functional team, to determine what dimensions of sustainability are most material to our stakeholders. The output of that team was a strong set of links between our vision as a 21st-century company, the markets we aspire to serve and the United Nations Global Compact’s Sustainable Development Goals (SDGs). Perstorp has been a signatory to the UN Global Compact since 2003.

With this roadmap, we know that our goals include improving the efficiency with which we use finite resources. But that approach will not be enough. We must push ourselves and our value chains into the circular economy by using more “wastes” as raw materials and fuels, while developing the renewable resources needed to support our present and future platforms. As the only constant is the promise of change, we must continually review our priorities and make certain that we are on the right path.

Perstorp has developed a metric which uses product Life-Cycle assessments to score each of our products on a common scale, while guiding us toward specific improvement activities relevant for each product platform. This Product Sustainability Index is now being used to evaluate all of our products and determine where we need to focus our sustainability efforts. By looking at multiple indicators simultaneously, we can ensure that changes we make to improve one aspect will not have a negative effect on another.



PROGRESS SUMMARY

Our performance on the major impacts (listed below) showed a continued improvement in 2016 when compared to the two prior years. Our use of energy and water, and emissions of pollution have all decreased as a fraction of the products we manufacture. We know that these are small improvements, but we are proud of what we have managed to achieve through using resources more efficiently.

Summary of Impacts	2014	2015	2016
Total Energy (MWh/ton product)	1.32	1.45	1.15
Water consumed (liters per kg)	2.1	2.2	2.1
Wastewater COD per ton	4.9	3.8	3.6
GHG (kg/T product)	234	256	203
Waste (kg/T product)	32.5	34.2	30.7

OCCUPATIONAL HEALTH AND SAFETY

During 2016 Perstorp continued its implementation of a Responsible Care methodology throughout the organization, including the roll-out of Life-Saving Rules. These rules govern activities where there is a risk of severe injury or death:

The golden rule – Anyone is expected to stop work if behavior or conditions are unsafe

- Safe Work Permit
- Hot work
- Lock out, Tag out, Try out (LoToTo)
- Working in confined space
- Safe line breaking
- Overriding safety devices
- Working at heights
- Hoisting & lifting
- Safe driving & travelling
- No use of alcohol & drugs

Our performance on standard Safety metrics (including our own employees + contractors):

	2014	2015	2016
Fatalities	0	0	1
Lost Time Accidents	8	11	11
OSHA Recordable Accidents	27	20	22
OSHAR*	1.51	1.12	1.25

ETHICAL BEHAVIOR

Perstorp has three foundational values:

Responsibility – Do right

Reliability – Keep the promise

Focused Innovation – Make it better

These values shape the world we create and inform our decision-making processes. Our Code of Conduct expands on these and forms a recipe by which we live our values. Perstorp does not engage in, or support partners engaged in employing children under sixteen years of age. Likewise we will not profit from the employment of people who are compelled to work.

In addition, specific policies address:

- Anti-corruption
- Anti-bribery
- Anti-competitive practices
- Conflicts of interest
- Non-discrimination in hiring

Investments in Responsible Care

Responsible Care (RC) Costs	2014	2015	2016
Disposal of hazardous waste	9.0	9.3	17.4
Disposal of non-hazardous waste	4.4	2.6	3.9
Disposal of waste water	27.1	26.4	27.1
Contaminated soil	0.0	0.2	0.0
RC fees paid	3.9	3.8	3.8
RC fines paid	0.0	0.5	0.1
Other RC related costs	37.4	33.0	32.8
Total RC Costs SEK million	81.9	75.8	85.2
% of net sales	0.7%	0.7%	0.8%
Total RC investments	54.3	39.6	37.0
% of total investments	6.5%	6.0%	6.7%

PROGRESS DETAIL

Consumption of Resources	2014	2015	2016
Raw Materials (kT)	1897	2009	2470
Product manufactured (kT)	1579	1577	1883

Energy Consumption (in GWh)	2014	2015	2016
Energy Produced in-house	1583	1766	1662
Renewable energy	16%	15%	15%
Reclaimed from production waste	44%	42%	59%
Amount delivered externally	(174)	(170)	(199)
Energy purchased as steam	329	341	378
Renewable Energy	0%	0%	3%
Electricity from local grid	327	331	326
Total Energy Consumed	2065	2269	2168
Total Energy (MWh/ton product)	1.32	1.45	1.15

Water Use (in millions of cubic meters)	2014	2015	2016
Surface Water	14.8	17.0	17.3
Ground Water	3.8	3.6	3.9
Rainwater	0.02	0.02	0.01
Municipal Supply	0.74	0.72	0.68
Other Sources	0.33	0.37	0.45
Total water withdrawn	19.7	21.7	22.3
Water returned unchanged	(16.4)	(18.3)	(18.4)
Water consumed	3.4	3.4	3.9
Water consumed (liters per kg)	2.1	2.2	2.1

Wastewater	2014	2015	2016
Organic water pollution, as Chemical Oxygen Demand (COD), Tons before treatment	7800	6040	6685
COD (kg/T product)	4.9	3.8	3.6



EMISSIONS TO AIR

Perstorp has a small continuing use of Ozone Depleting Substances (ODS) in cooling systems across the organization. Those systems use just over 2 tons of ODS coolants, with a leakage of 97 kg in 2016. Starting in 2016, Perstorp has used certified reference values** for determining our emissions of greenhouse gases (GHG). This led to an apparent decrease in our total emissions from the values reported in prior years. In the interest of transparency, we have re-calculated our emissions of GHG for 2014 and 2015, using these same emissions factors. We believe that we have achieved a substantial decrease in actual GHG emissions per ton of product manufactured.

Air Emissions	2014	2015	2016
Scope 1 GHG (kT)	361	397	379
Scope 2 GHG (kT)	8	7	4
Total GHG (kT)	369	404	383
GHG (kg/T product)	234	256	203
VOC (T)	139	187	149
NO _x (T)	161	160	156
SO _x (T)	6.4	5.7	8.6

**** - Our references for GHG emissions factors are, in descending order of priority:**

- United Kingdom Department of Energy and Climate Change 2015 Set of Conversion Factors
- United States Environmental Protection Agency 2014 Standard Emission Factors
- Ecometrica 2011 Electricity-Specific Emission Factors for Grid Electricity
- Intergovernmental Panel on Climate Change 2006 Guidelines for National Greenhouse Gas Inventories

Waste Generated	2014	2015	2016
Hazardous Waste (T)	40587	42276	48601
Recycled	2%	11%	2%
Incinerated for energy recovery	83%	73%	76%
Landfilled	1%	1%	0%
Other disposal methods	14	15	22
Non-hazardous Waste (T)	10664	11596	9238
Recycled	12%	15%	14%
Incinerated for energy recovery	18%	9%	8%
Landfilled	64%	60%	66%
Other disposal methods	6	16	12
Total Waste (T)	51251	53872	57839
Waste (kg/T product)	32.5	34.2	30.7

A close-up photograph of a person's hand, palm side up, touching a dense, vibrant green moss. The hand is positioned on the left side of the frame, with fingers spread. The moss covers most of the background, with a blurred, warm-toned area on the right side. The lighting is soft, highlighting the texture of the skin and the individual blades of moss.

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 the process we annually follow for assessing the result and behavior of all employees within the company. The 10 defined behaviors are built upon the Core Values; Reliability, Responsibility and Focused Innovation. By assessing all employees on their behavior we clearly show what's expected from them and how each employee can improve.

The process also includes development activities, short- and long-term career planning and objectives setting for the upcoming year.

PMD are aligned to both the Talent Management Process and the Succession Planning Process (see to the right).

THE TALENT MANAGEMENT PROCESS

In 2015 we implemented the Talent Management Process. 32 talents were identified. All of them has 2016 gone through a four day Leading Change Program (see below) to prepare them for future challenges.

The Talent Management Process is bi-annual. End of 2016 we started the preparations for a new process where we will use the outcome from the PMD-discussions as a feeder into the nomination part of the process. Next step will be an offer to the identified talents to participate in an assessment measuring both their potential and their readiness to take on new challenges. The assessment also compare our talents with talents from other chemical companies.

After the assessment and feedback, we set individual development plans for the talents. The Talent Management Process is aligned with the Succession Planning Process (see below).

THE SUCCESSION PLANNING PROCESS

In 2016 we implemented an annual Succession Planning Process. The process starts up by identifying the critical roles in the organization. Next step is to analyze what the essential and successful skills are in each critical role.

After that we look through the organization and identify both short term successors and long term successors. The Talent Management Process is aligned especially in this part of the process. The result serves as a feeder to development of the long-term successors. When we can't identify any long-term successor we need to take a decision to recruit or to take other actions.

The Succession Planning Process is used through the whole organization and in all different levels in the organization, but are not aligned to the Talent Management Process on local levels.

PERSTORP ACADEMIES

We continued to run the Process Academy 2016. We also started up the Leadership Academy 2016. The Leadership Academy is a way to collect all leadership development activities in one place. During the year we made a big investment in our leaders. Our 100 top-managers participated in a four day long Leading Change training including Change Management and Coaching. The training also became the foundation to the annual executive management event 2017 where we discussed and agreed upon each Functions Extra Ordinary Result.

Except from the Leading Change program the Leadership Academy also contains of a 12 days leadership training, Certified Leader in Perstorp. The training is offered all managers on all levels in the company, ideally managers take on the training when they enter their first management position. We also have a few "off-the-shelf" trainings in the Leadership Academy. During 2017 we will continue to build up the Leadership Academy.

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

As in 2015 we run a mini-employee survey 2016. The result showed very small changes compared to the result 2015. The response rate was continuously high; 92,5%. The overall index; Performance Index ended up on 3,6. That was the same result as 2015. The Leadership index ended up on 3,7, which also was the same score as last year.

2016 we launched a new index; Change Index. The reason is to follow up the effect of all change activities we have launched in the company. The result the first year was 3,2.

The Performance Index and the Leadership Index are on a healthy level compared to similar business in the vendor's data-base. During 2016 we implemented 81% (421) of the 521 identified improvement activities in the survey 2015.

ORGANIZATION AND SOCIAL WORK ENVIRONMENT

2016 the company trained 89 out of 93 managers in Sweden in Organization and Social Work Environment. The training is compulsory and are aiming to provide all managers with the knowledge how to prevent and handle unhealthy stress and heavy work-load, how to prevent victimization and bullying and how to plan working hours in an efficient way.

Objectives has been set up to improve the Organization and Social Work Environment.

Next step will be to design the training to an international environment and launch it at our production sites and local offices outside Sweden.

PERSTORP GYMNASIUM

The Perstorp Gymnasium train and educate 16 to 18 years-olds, and equip them for a technical, vocational career.

As from 2016 we have expanded the program to educate and train also electrician and automation technicians. We enjoy good collaboration with staff, both in Sweden and other countries, and students at the school, and provide the students with opportunities for work experience.

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

SUSTAINABLE HR AND DIVERSITY

2016 was the year when Perstorp kicked-off a project aiming to describe and make clear to the employees our stand-point on sustainability from a company view, a leadership view and an employee view.

The work will be finalized 2017 with actions both in policies and regulations, but also guiding us on how to make the leadership sustainable and how to make "work workable" together with our employees.

A major part in Sustainability HR is Diversity. The company has set up a few long term objectives and activities to start moving in the right direction will be implemented 2017.

The objectives are;

- On top-management level (The Board and ELT) we aim to have a better gender balance than the OMX Stockholm Large Cap (20% women in 2016)
- Long term objective within Perstorp is to have a maximum 40-60 difference in gender in 80% of all Management Teams (suggested to happen latest 2023)
- PLT shall have a 40/60 spread in gender and nationality (Swedes/non Swedes) latest 2023
- The Talent Management pipeline shall latest 2019 consist of 50% men and 50% women and 50% Swedes and 50% non-Swedes (2015; 34% women/66% men and 25-34% non-Swedes/64-75% Swedes).

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 that only organizations that put sustainability at the center of their business will be 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 many focused acts, large and small, ultimately add up to help transform the world.



Improving everyday life

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.