ORION
Building well-being

Orion Group Sustainability Report 2019

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About this report

The Orion Sustainability Report 2019 includes information about Orion's sustainability performance and major milestones during 2019. Sustainability key figures can be found at the end of the report.

This report refers to the Global Reporting Initiative (GRI) Standards 2016. GRI content index is located at the end of the report.

Read more about this topic on our web pages.
orion.fi/en

Orion today

Orion today

A builder of well-being, a manufacturer of pharmaceuticals and active pharmaceutical ingredients

Orion is a globally operating Finnish pharmaceutical company. We describe ourselves as a builder of well-being. We innovate, develop, manufacture, sell and market human and veterinary pharmaceuticals, as well as active pharmaceutical ingredients. We also serve as a contract manufacturer to other pharmaceutical companies.

We are continuously developing new drugs and treatment methods. The core therapy areas of our pharmaceutical R&D are central nervous system (CNS) disorders, oncology and respiratory diseases, for which we develop inhalable Easyhaler® pulmonary drugs.

Our mission is to build well-being by providing high-quality pharmaceuticals and self-care products that help people take good care of themselves every day. Pharmaceuticals provide patients with help and effective treatment for their illnesses. An effective drug also creates added value for patients by improving their quality of life.

Orion has developed from a shop founded by three pharmacists more than a century ago into an international company that carries out medical research at the highest international level. We are now the leading pharmaceutical company and one of the oldest and most financially sound companies in Finland.

The Group consists of the following businesses:

Proprietary Products
Drugs developed in-house and other drugs with product protection

Specialty Products
Generic prescription drugs, self-care products and biosimilars

Animal Health
Medicine and well-being products for animals

Fermion
Active pharmaceutical ingredients (APIs)

Contract Manufacturing
Production for other pharmaceutical companies

MEUR
1,051
NET SALES

PERSONNEL
3,265

Orion's business operations in Europe are based on our own sales network, and sales elsewhere in the world mainly through partners. Orion has initiated an assessment on the prospects of launching the product in the development stage, ODM-109, in the United States on its own, and is also initiating small-scale sales operations in certain Southeast Asian countries.

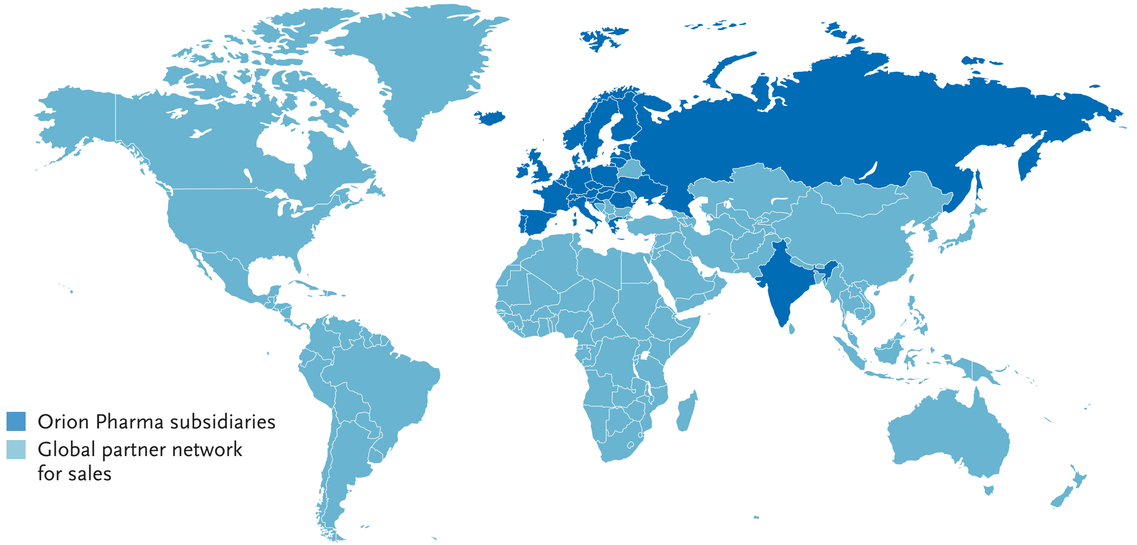
Our production plants and pharmaceutical research centres are located in Finland, and we have a research unit in Nottingham, England. The largest of our sites is Mankkaa, Espoo, where our head office is located.

Orion's products are available in pharmacies and hospitals in over 100 countries. The Group's net sales in 2019 were EUR 1,051 million.

Our customers include healthcare providers and professionals, consumers and other pharmaceutical companies.

In healthcare, our customers are primarily specialist doctors and general practitioners, vets, nurses, pharmacies, hospitals, healthcare centres, clinics and laboratories and their respective procurement organisations.

Read more:
orion.fi/en

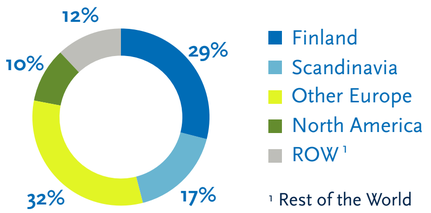


Operations and sites of the Orion Group:

Finland	Headquarters and administration in Espoo Pharmaceutical manufacturing in Espoo, Turku, Kuopio and Salo Active pharmaceutical ingredient R&D in Espoo, manufacturing in Hanko and Oulu (Fermion) Pharmaceutical R&D centres in Espoo and Turku and R&D function in Kuopio Marketing: Espoo, Turku, Kuopio, Oulu and Tampere
UK	Sales unit in Newbury, England R&D function in Nottingham, England
Europe	Orion Pharma subsidiaries with sales and marketing operations in 26 countries
India	Support functions (incl. R&D function) subsidiary FinOrion Pharma India Pvt. Ltd. in Mumbai
Rest of the World	Global partner network for sales

Orion's products are available in pharmacies and hospitals in over 100 countries.

Sales by market area, %



CEO's overview

Orion's mission is to build well-being. We have defined continuous improvement in sustainability as one of our strategic targets. In 2019, we also started a strategic development project regarding sustainability with the aim of crystallizing what sustainability truly means for us and how it is vital for all of us at Orion in our everyday work.

Shared values and ways to operate
The year started with the launch of our renewed values: 'appreciate each other', 'strive for excellence' and 'build the future'. These shared values are the cornerstone of our everyday actions.

In addition to renewing our values, we revised and updated Orion's Code of Conduct (CoC), which sets out the code for everything we do. The revision was done to meet today's requirements and to ensure that that the CoC guides our business practices in all relevant topics. We published the CoC in 14 languages and revised the content to bring the code closer to all stakeholder groups. We will launch a Code of Conduct e-learning in 2020 to support Orionees to familiarise themselves with the code.

Sustainability Agenda defined
In 2019, we continued to build the solid foundation for Orion's sustainability approach by defining the Group's sustainability agenda. The key themes of our sustainability agenda are patient safety and ensuring the reliable supply of medications, manufacturing products in an environmentally sustainable way, responsibility for Orionees, and business ethics and transparency.

We also defined our commitments on sustainability and revisited targets, KPIs and set actions to enable our continuous improvement in sustainability. The steps we have taken support us in the journey of integrating sustainability into our everyday work.

Emphasis on the availability of medications
Uninterupted availability of medications is a challenge for the entire pharmaceuticals industry. By ensuring reliability and quality through the value chain and by building responsible networks, we enable the availability of medicine to those who need it.

The availability of Orion's pharmaceuticals in Finland remained at a good level, with an availability of 97% in 2019. We will continue to put emphasis on the systematic work to ensure the availability of our medications.

Combatting climate change
Climate change requires global actions, and we recognise Orion's role to contribute. We have set an ambitious climate target for reducing greenhouse gas emissions: a reduction of 75% by the end of 2025. In 2019, we were already successful in reducing our greenhouse gas emissions by 55%. One of the major contributors to this reduction was Orion's operations in Finland starting to use 100% renewable electricity. In 2020, we will continue our work towards our climate target.

This progress could not have been achieved without competent and committed Orionees. I want to thank all Orionees, our partners and suppliers for the valuable contribution to our successful year in 2019. Integrating sustainability into everything we do is a journey with strong cooperation between all stakeholders.

Timo Lappalainen
President and CEO

Our year of sustainability

YEAR 2019 HIGHLIGHTS

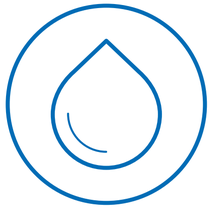
2019 was a year of clarifying the role of sustainability for Orion.

We defined our Sustainability Agenda and our commitments related to corporate responsibility. We set targets, KPIs and actions to ensure the progress of our Sustainability Agenda, which consists of four key themes. We made progress in all the key theme areas, of which highlights are presented on this page and through the report.

We further developed and implemented an increasingly robust supplier sustainability risk assessment process and increased awareness on sustainability through training.

SUSTAINABILITY AGENDA

Patient safety and ensuring reliable supply of medications:
We were able to ensure 97% product availability in Finland, despite the product availability challenges in the pharmaceutical industry. **Read more**



Manufacturing products in an environmentally sustainable way:
We continued to roll out the Energy Efficiency Programme with good results and we are progressing on our efforts to reduce our greenhouse gas emissions. **Read more**

Responsibility for Orionees:
Our shared values were jointly renewed and implemented. **Read more**

Business ethics and transparency:
Orion's CoC was renewed. We will support Orionees in familiarising themselves with the CoC through online training in 2020. **Read more**

We will continue to improve
Our occupational safety performance has not progressed as expected, and we still have a long way to reach our target of zero accidents. We will continue to improve our safety culture and provide Skills to care training to all managers in Finland to ensure our performance will improve. **Read more**

Our approach

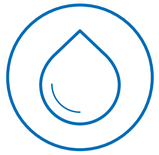
Our approach

Sustainability at Orion

Orion's Sustainability Agenda consists of four key themes: patient safety and ensuring the reliable supply of medications, manufacturing products in an environmentally sustainable way, responsibility for Orionees, and business ethics and transparency.

OUR SUSTAINABILITY COMMITMENTS

Patient safety is our key focus and fundamental priority in everything we do. We are committed to ensuring the reliable supply of medications.



We aim for the highest environmental standards in the industry.

We aim for the highest health and safety standards in the industry. We are a responsible employer committed to build well-being and enthusiasm together in the workplace. Orion is a great place to work.

We are committed to high ethical standards and expect the same from our partners. Transparency is the key to maintaining and building trust. We work continuously to improve transparency in our activities.

Our Sustainability Agenda is based on materiality assessment

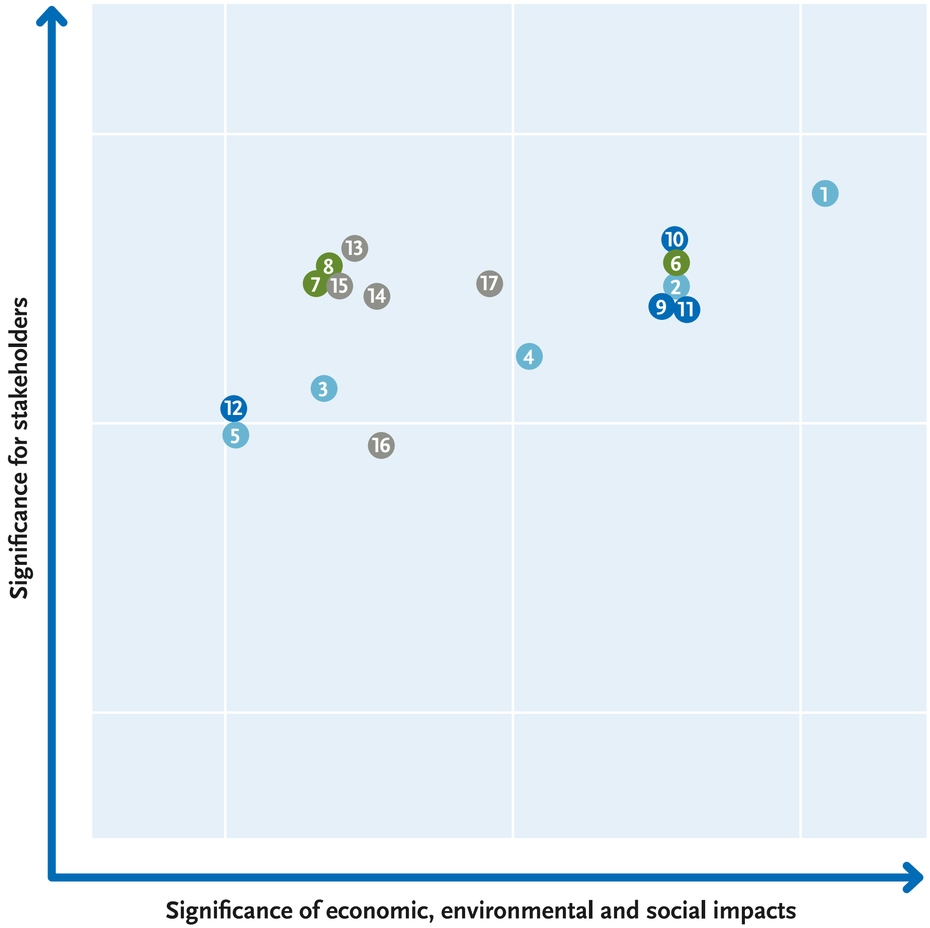
We use materiality analysis as a tool to highlight the most material sustainability topics. It helps us to identify corporate responsibility topics that affect our stakeholders and are particularly relevant for us and our business, today and in the future. Materiality analysis was used as the basis for defining Orion's Sustainability Agenda. Our sustainability reporting is also based on the materiality assessment.

The materiality of our sustainability topics was re-assessed in 2018, with support from external consultants. The assessment consisted of four parts: defining sustainability topics, a stakeholder survey, determining significance of impacts and analysis of results.

Dialogue with our stakeholders is essential, and we wanted to ask our important stakeholders for their viewpoints on the materiality of corporate responsibility topics. We received more than 1,440 replies to the survey from our key stakeholders (i.e. personnel, healthcare professionals, decision-makers, partners, investors and consumers).

According to the materiality analysis, the most material issues for us are patient safety, ensuring a reliable supply of medications and manufacturing products in an environmentally sustainable way. All the issues in the matrix are material but the priority of the topics differ. In the matrix, the vertical axis represents the significance for stakeholders and the horizontal axis represents the significance of Orion's economic, environmental and social impacts.

Materiality analysis



RESEARCH AND DEVELOPMENT	PRODUCTION AND SUBCONTRACTING	DEVELOPMENT OF NATIONAL HEALTH CARE	ORION AS A SOCIAL PLAYER
1. Patient safety is the cornerstone of Orion's corporate responsibility	**6.** We manufacture medicines in an environmentally sustainable way, taking care of material and energy efficiency and wastewater treatment	**9.** We bring cost-effective medicines to the Finnish market	**13.** We are a responsible employer and taxpayer
2. We invest in the early research and development of new medicines	**7.** We take care of occupational health and safety and human rights in the whole supply chain	**10.** We ensure the availability of medicines in unexpected situations	**14.** We invest in the well-being and constant development of our staff
3. In addition to developing medicines, we take part in developing new treatments	**8.** Our supply chain is transparent and we are open about it: we communicate consistently about both positive and negative matters	**11.** We educate healthcare professionals about the effects of medicines	**15.** Our marketing and communications are ethical and they are based on facts and research
4. We develop medicines specifically for national chronic diseases		**12.** We produce information and take part in social dialogue	**16.** Our management systems and our corporate responsibility reports are verified by a third party (e.g. ISO14001, GRI)
5. We actively develop products and solutions for self-care			**17.** We act to reduce environmental impacts caused by the use of medicine (e.g. packaging, production, logistics, wastewater)

Our memberships in industry associations and advocacy organisations

- Chemical Industry Federation of Finland / Confederation of Finnish Industries, EK
- International Chamber of Commerce, Finnish Section
- Helsinki Region Chamber of Commerce
- Turku Chamber of Commerce
- Finnish Health Technology Association (FiHTA) / The Federation of Finnish Technology Industries
- The Association for Finnish Work
- Excellence Finland
- CEFIC (European Chemical Industry Council) and its sub-organisation APIC (Active Pharmaceutical Ingredients Committee – Cefic)
- FIBS, sustainability network in Finland
- Pharmaceutical Supply Chain Initiative, PSCI
- AnimalHealthEurope

Our commitments to external initiatives

Orion is a member of the international Responsible Care programme, which is a voluntary environment, health and safety initiative of the chemical industry. The objective of the programme is to promote operations in line with sustainable development, from both social and environmental points of view. All participating companies are committed to continuously improving their health, safety and environmental performance and to developing their products and operations in a way that increases social well-being. The programme has participants in over 50 countries. The Chemical Industry Federation of Finland coordinates the membership of Finnish companies in Responsible Care, which reports on the performance on an annual basis.

We are also members of the Finnish Energy Efficiency Agreement for Industries 2017–2025. Under the programme, the savings target for 2025 is 7.5% of energy consumption in 2016, and the intermediate target is 4% for 2020.

We are a member of the Pharmaceutical Supply Chain Initiative (PSCI) and endorse the PSCI Principles, which set standards for suppliers in the areas of ethics, labour, health and safety and environment. PSCI is a group of pharmaceutical and healthcare companies that shares a vision to establish and promote responsible practices that will continuously improve social, health, safety and environmental sustainable outcomes across the industry.

A member of the FTSE4Good index

For several years, Orion Corporation has featured in sustainability indexes of companies listed on the Nasdaq Helsinki stock exchange (OMX Sustainability Finland GI, OMX Sustainability Finland PI, OMX Sustainability Finland Cap GI and OMX Sustainability Finland Cap PI).

We have been a member of the globally recognised FTSE4Good Index since 2016. The companies in the index have been independently assessed to meet the FTSE4Good criteria. The FTSE4Good Index Series is designed to measure the performance of companies with strong environmental, social and governance (ESG) practices.

PSCI
HARMACEUTICAL SUPPLY CHAIN INITIATIVE

FTSE4Good

Values and principles as cornerstones

Our corporate values characterise our way of working within the Orion Group: 'appreciate each other', 'strive for excellence' and 'build the future'.

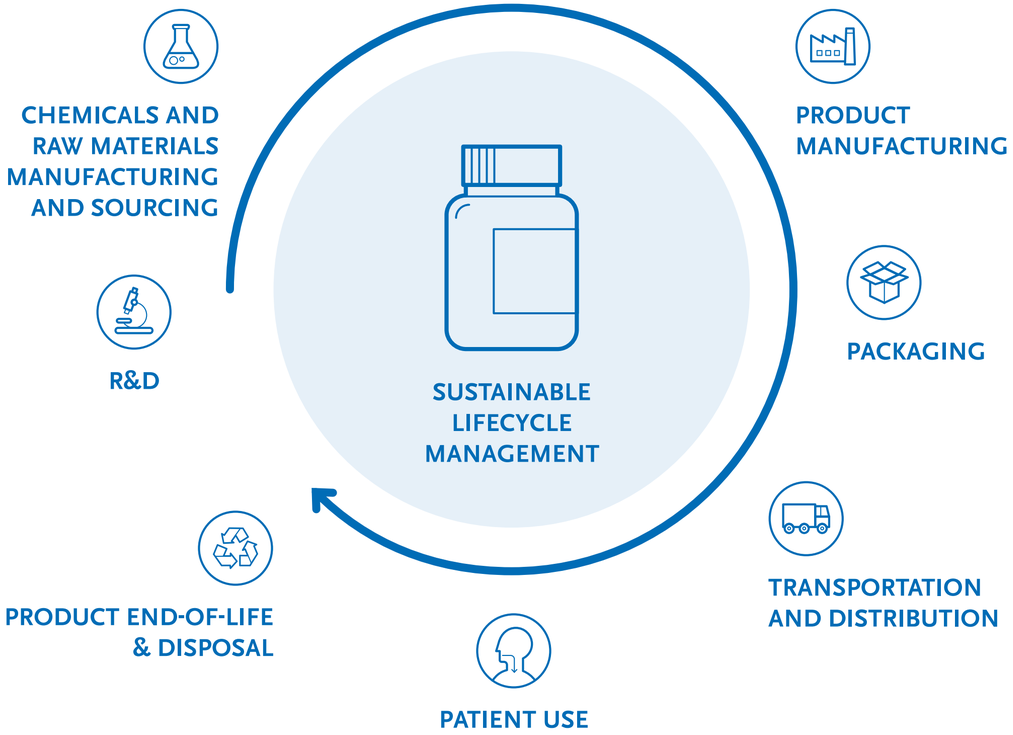
We are committed to operating in a responsible and sustainable manner and enhancing ethical working practices. Our Code of Conduct (CoC) determines the basic principles that our employees are expected to follow in their interactions with one another and with the stakeholders of our company, as well as with society and the environment. Each of our employees should be committed to the high ethical standards and business practices as outlined in our CoC.

In addition to the above, our operations and ways of working are subject to specifically determined company policies and numerous mandatory guidelines concerning our practices. All of our policies have been approved by the Group's executive management, and they are applied groupwide. Especially important are the Good Practices (GxP) required to be followed by healthcare industries worldwide in the development and manufacturing of pharmaceuticals. Standard Operating Procedures (SOPs) are detailed internal guidelines, based on the GxP, providing details of the procedures to be applied in work phases as well as the related requirements and responsibilities.

In addition to the regulatory requirements from healthcare authorities, pharmaceutical companies are bound by numerous commonly agreed industry rules and codes concerning marketing, research and development, and collaboration with healthcare professionals and patient organisations. Orion is committed to the principles of codes of practice of the European Federation of Pharmaceutical Industry Association (EFPIA) in marketing and transparency of information. Orion is not a member of EFPIA's central organisation but is a member of a few national associations.

Our corporate strategy emphasises a strong culture of collaboration, based on significant work that creates value for our customers. We want to be an excellent workplace and a responsible and attractive employer that continuously develops the well-being and skills of its employees.

We are committed to improving our performance in sustainability. We stand by our commitments and strive to achieve the high targets we have set for ourselves in our Sustainability Agenda. Patient safety is the guiding value in all of our operations. We ensure that the pharmaceutical products we develop, manufacture, sell and market are proven to be safe for their users when used correctly, effective for the indications for which they are approved, and consistent with the quality standards set for them.



Sustainable pharmaceutical product lifecycle management

Sustainability at Orion means balancing social, economic and environmental factors, and is a principle built into our common values. We consider these aspects over the entire lifecycle of a product, from research and development through to manufacturing, to patient use, and product end-of-life disposal.

Research and development

In our research and development activities, our commitment to building well-being means that we develop efficacious and safe medicinal treatments for unmet medical needs, representing innovation and the highest quality standards. We are committed to high ethical standards concerning pharmaceutical research and development and we follow regulations of data privacy in our actions.

We conduct environmental, health and safety risk assessments for all new products before manufacturing starts.

Chemicals and raw materials manufacturing and sourcing

Suppliers are required to comply with Good Practices (GxP) requirements. In addition to this, as we have stated in our Third-Party CoC and Supplier Sustainability Requirements, we expect our suppliers to demonstrate their commitment to sustainable and ethical practices. We only purchase our materials from suppliers whose qualifications we have confirmed. We conduct GxP audits into the operations of our GxP-critical business partners and suppliers. We always take and analyse samples of raw materials before approving them for production.

We also manage and monitor our suppliers' environmental, health and safety (EHS) and ethical compliance. Our risk-based sustainability programme conducted 13 sustainability on-site audits in 2019. We continued to further integrate sustainability into the processes and day-to-day activities in our procurement department and trained procurement professionals on sustainability.

Product manufacturing/our own factories

We have identified the most significant environmental aspects of our company, and we continuously improve our performance in this regard. Among other things, particular emphasis has been placed on continuously improving our wastewater handling and focusing on occupational health and safety at our factories.

We are also committed to reaching the energy savings target for 2025, which is 7.5% of energy consumption in 2016. This means a saving of slightly over 12 GWh, 51% of which was achieved by the end of 2019. We are committed to cutting our scope 1 and 2 greenhouse gas emissions according to IPCC recommendations. This means reductions of 75% by the year 2025, using 2016 as the reference year. In 2019, we took a first major step towards this goal by using only electricity produced by renewable fuels.

By the end of 2019, we reduced our CO_2 emissions by approximately 55% compared to 2016.

Our products are manufactured using qualified production equipment in a controlled production environment using validated production and quality control methods to ensure that each batch fulfils predetermined quality specifications. The data integrity of all manufacturing and quality control activities is reviewed in detail before a batch is released to market. We take immediate action if any deficiency concerning product quality is detected.

Packaging
We minimise waste through package design, and optimise shelf life, package sizes and material flows. Optimising shelf life is of particular importance to ensure that all the resources needed in manufacturing, packaging and transportation are not wasted.

Safety is also an important aspect in packaging. Packaging plays an important role in protecting our products. Packaging includes several safety measures: serialisation and anti-tampering features to improve safety and traceability even further.

Transportation and distribution
In logistics, we use specialist service providers to meet our strict quality and reliability requirements. Our partners have measures in place to reduce their own environmental impact.

Patient use
We conduct continuous safety monitoring, collect customer feedback and carry out benefit-risk evaluations throughout the entire lifespan of a product.

We also provide healthcare professionals with clear information on the appropriate use of our medicinal products.

Product end of life and disposal
We make sure that waste materials from our own operations are appropriately treated. Medicines that are expired or no longer needed should be returned to pharmacies to be disposed of appropriately, and packaging materials should be taken to dedicated collection points for recycling. Guidance on the proper disposal of pharmaceutical waste may be accessed on our webpages. For local information it is advisable to consult your pharmacy, as medication disposal schemes preventing pharmaceuticals from ending up in the environment may vary from country to country.

Using only
electricity produced by renewable fuels.

55%
REDUCTION IN CO_2e EMISSIONS IN 2019 (VS. 2016)

TARGET
75%
LESS CO_2e BY THE END OF 2025

CASE

First Carbon Footprint Assessment of Orion's Dry Powder Inhalers

Orion conducted its first carbon footprint and comprehensive life cycle assessment (LCA), for Easyhaler in 2019. We wanted to improve our understanding of our climate impact and the environmental impact of our products more comprehensively.

In Europe, 30 million people with asthma need to use different medications to treat asthma symptoms such as shortness of breath or a cough. The majority of medications are taken via inhalers – devices that deliver either a powder or an aerosol formulation of drugs into the lungs.

Our dry powder inhaler Easyhaler has been developed for the treatment of asthma and chronic obstructive pulmonary disease (COPD), and it was the first product on which LCA was conducted. Easyhaler is a good example of our environmental efforts, as one of the original Easyhaler development objectives was to create a propellant-free inhaler to help reduce our impact on the environment. We have been carrying out these efforts since the 1980s.

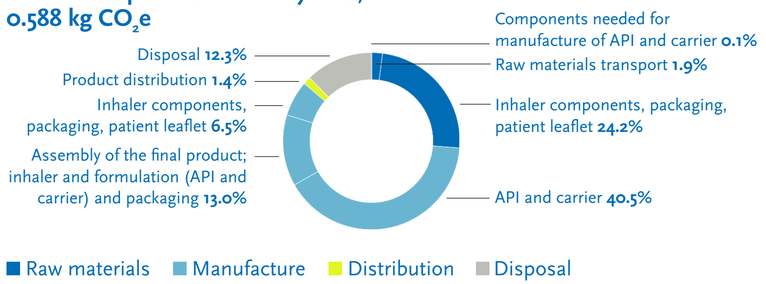
The Montreal Protocol in 1987 prohibited the use of ozone-depleting chlorofluorocarbon (CFC) propellants for inhaled products as used in metered dose inhalers (MDIs). Since the Montreal Protocol came into force, the use of most ozone-depleting substances has either ceased or at least declined.

CFCs were replaced by hydrofluoroalkane (HFA/HFC) propellants, and their use is still permitted in MDI medications. In MDIs, propellants are discharged during use and released after product disposal. These propellants, HFCs, are potent greenhouse gases with around 1,300 times more global warming potential than carbon dioxide. Also, the carbon footprint of single MDI products is still 10–37 times higher than dry powder inhalers (DPIs)[1].

The cradle-to-grave LCA was conducted for four different Easyhaler products available for the treatment of asthma and COPD. For each assessment, we used the most used strength and number of doses per device.

The analysis covered raw material extraction, upstream materials preparation, transportation, manufacture, processing and assembly, distribution, and disposal. Analyses were performed in accordance with ISO 14040 and ISO 14044 and verified by external carbon footprinting company, Carbon Footprint Ltd.

Carbon footprint for one Easyhaler, 0.588 kg CO_2e



Average of the four Easyhaler products, range 0.514–0.664 kg CO_2e. For each, the most used strength and number of doses per device was used for this analysis.

API: Active Pharmaceutical Ingredient

The most important impact source for most indicators was manufacturing, which accounted for around 60% (range 54–65%) for carbon footprint. In comparison, emissions from distribution accounted for less than 2%, indicating that most potential for improvement lies in manufacturing processes.

The results represent the estimated environmental impact for creating, using and disposing the inhaler device. Several environmental indicators, such as climate change, toxicity and water depletion were assessed to ensure a holistic understanding of the environmental impact.

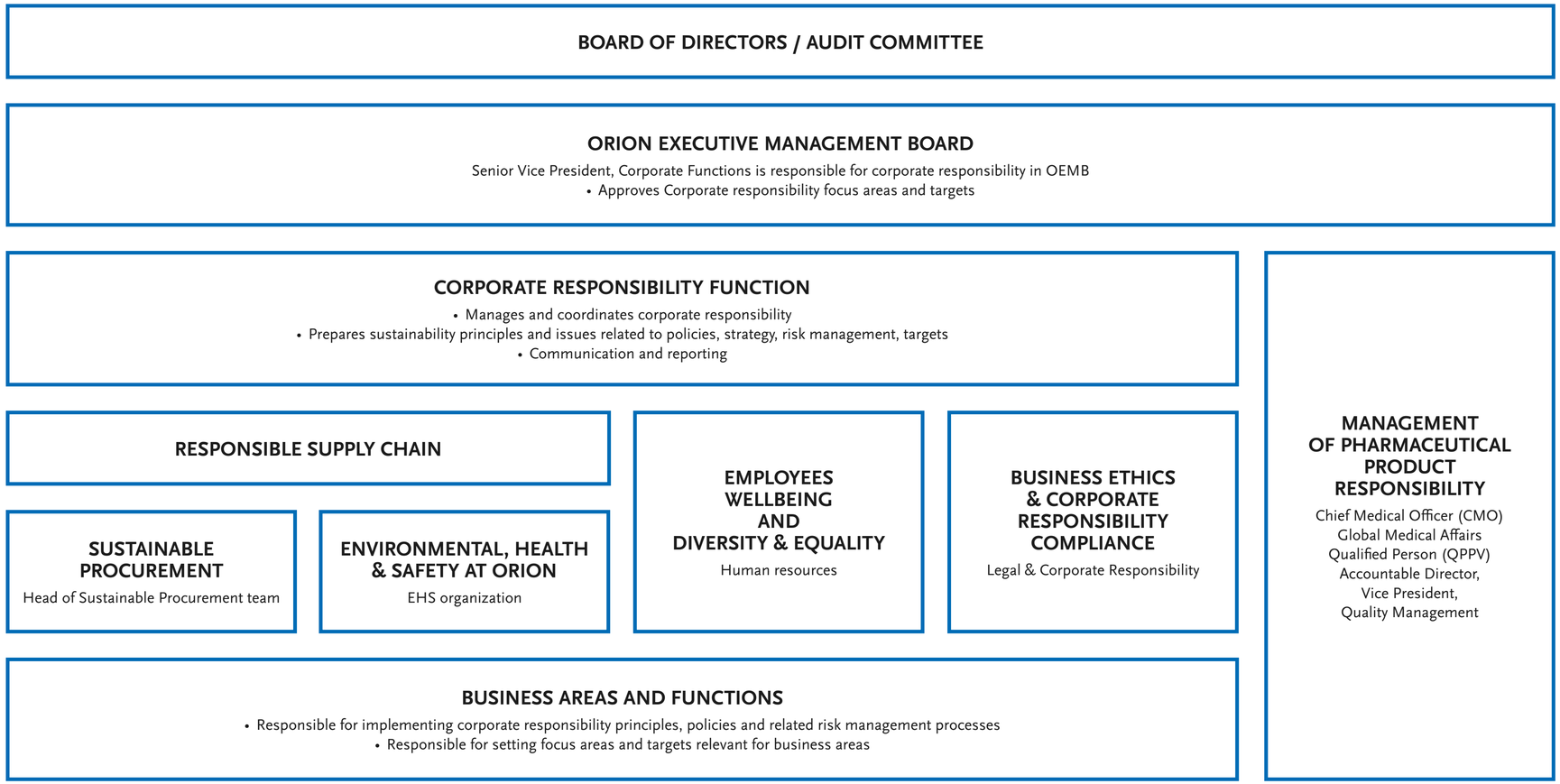
Read more

1. Medical and Chemicals Technical Options Committee. 2018 Assessment Report. Available at: https://ozone.unep.org/science/assessment/teap/. [Accessed 13 February 2020].

Corporate responsibility governance

Orion's corporate responsibility governance model provides a solid foundation for managing and developing sustainability throughout the company. The Board of Directors oversees all matters concerning sustainability and approves the statutory reporting. Sustainability is led by the CEO and Orion Executive Management Board, and all Orionees have a role to play in ensuring that sustainability is embedded into the business. Key responsibilities and internal stakeholders are presented in the chart.

The corporate responsibility function, which belongs to the Corporate Functions organisation, is managed and coordinated by the Head of Corporate Responsibility. She reports to the Senior Vice President of Corporate Functions, who is a member of the Orion Group's Executive Management Board and reports to President and CEO.



Our targets and performance

CORPORATE RESPONSIBILITY FOCUS AREA	TARGET	2019 PERFORMANCE	PROGRESS	ACTIONS TAKEN AND PLANNED
Patient safety and ensuring reliable supply of medications	Orion ensures reliable supply of medications	97% pharmaceutical product availability in Finland	🟢	• Orion continues to ensure product availability by preventing supply disruptions.
	Orion ensures patient safety, which is the fundamental priority in everything we do	7 quality related product recalls	🟢	• Orion continues to ensure patient safety via rigorous quality, safety and efficacy procedures.
Environment	Improving energy efficiency by 7.5% (12,154 MWh) by end of 2025 (baseline 2016)	51% (6,231 MWh) of Energy Efficiency Programme targets achieved	🟢	• Orion continues the Energy Efficiency Programme • Fermion's plant in Oulu was awarded as Energy Genius of the Year
	GHG emissions (scope 1 and 2) reduction by 75% by end of 2025 (baseline 2016)	GHG emissions (scope 1 and 2) -55%	🟢	• Orion transitioned to renewable electricity in 2019 • Development of a roadmap to reduce GHG emissions in 2020–2025
	Reduction of share of hazardous waste per total waste	Hazardous waste per total waste 84% (2016: 77%)	🟡	• Development of a roadmap to reduce hazardous waste per total waste • Continue solvent regeneration and recycling programs in Fermion
Responsibility for Orionees	LTIF1 3.5 by end of 2019	LTIF1 6.3	🔴	• Program to improve safety culture continues • Skills to care training continues
	Decrease absences due to illness	Absence rate due to illness 3.3% (2018: 3.1%)	🟡	• Skills to care training continues with additional focus on identifying early signs of employee burnout • Early intervention operating model updated in 2020
Business ethics and transparency	100% of active packaging material, raw material and product suppliers signed Third Party Code of Conduct	79% of active packaging material, raw material and product suppliers signed Third Party Code of Conduct	🟢	• Roll-out of sustainable procurement processes continues
	Orion ensures that all white collar employees are regularly trained on anti-corruption and anti-bribery matters. All new employees are trained.	443 new orionees trained	🟢	• Continue to provide an e-learning to all new white collar employees

Our stakeholder groups

Orion is involved with a number of stakeholder groups with whom our Group and its representatives interact, which are both affected by our activities and can directly or indirectly affect our business and performance. We continuously engage with our stakeholders to promote Orion's and its stakeholders' interests. Stakeholder feedback is systematically collected and utilised to develop our operations accordingly. For example, patient safety is promoted based on the feedback collected from healthcare professionals to develop the instructions and communications about the appropriate use of our products. Consumers' reports on any adverse effect of our products are investigated and corrective actions are taken accordingly.

The key stakeholders have been defined based on the criteria such as expectations of the stakeholder groups towards us and their importance to our business.

The main topics for our key stakeholders in 2019 were patient safety and the availability of medications. Also, the recalls of selected products were noted among several stakeholder groups.

The main topics in 2019 were patient safety and the availability of medications.

Patient safety and ensuring reliable supply of medications

Ensuring patient safety, product safety and reliably supply

Patient safety is our guiding value at Orion, and a fundamental priority in everything we do. It is integrated into all of our processes through the value chain, and something on which we do not compromise.

At Orion, we provide patients with products that are effective, safe to use, of high quality, and available for the patients who need them. We ensure patient safety through rigorious management of our operations, upstream and downstream supply chain, and by continuously monitoring any signs of adverse effects or quality issues over the course a product's lifecycle.

We promote health and quality of life with our products and by sharing guidance to consumers and healthcare professionals on the correct and proper use of the products.

As a pharmaceutical company, we are legally obligated to monitor the safety and quality of our products. We ensure that the drugs developed, manufactured and marketed are proven to be safe for their users, effective for the indications for which they are approved, and consistent with the quality standards set for them.

Ensuring the availability of medications by preventing supply disruptions and by communicating through appropriate channels constitutes part of ensuring patient safety. We also make certain that our suppliers meet the same quality requirements as our own operations.

Orion's responsibility of it's product portfolio

Pharmaceuticals constitute a significant global market in which pharmaceutical companies network with each other extensively. One drug product contains four to ten ingredients commonly purchased from highly specialised chemical plants from all over the world.

Orion is responsible for the patient safety of the products that are under it's marketing authorisation, irrespective of their origin or ingredient origin. Our production operations are located in Finland, but we also procure active pharmaceutical ingredients and final products globally.

We have a broad product portfolio of generic prescription drugs in almost all therapy areas. We develop new treatments for cancer, central nervous system disorders, asthma and chronic obstructive pulmonary disease. Our product portfolio includes biosimilars, self-care products and veterinary products.

Our product portfolio contains products manufactured by other pharmaceutical companies as well as products that we manufacture ourselves but for which other companies deliver active pharmaceutical or other ingredients. Similarly we also produce and export active pharmaceutical ingredients (API) to the global market. For some APIs our global market share can be considered significant, for example the share of methotrexate produced by Fermion has more than 30% market share globally.

Because of the broad product range, risk management of the delivery reliability is crucial. Possible problems related to the delivery reliability or quality of the products of external manufacturers may cause a risk to our supply capacity.

Also, maintaining the required high quality standard means that our production is closely monitored and managed to minimise product quality risks. Authorities and customers undertake regular and detailed inspections and audits of development and manufacturing of drugs at our production sites. Carrying out any corrective actions based on the inspections and audits may, at least temporarily, have effects that decrease delivery reliability.

Good operating practises

The guiding principles of the quality standards of our entire supply chain are based on full compliance with EU-regulated good operating practices in manufacturing, laboratories and R&D. They rely on efficiency and fluency of the processes, product safety, as well as the consistent quality and high supply capability.

Good Practices (GxP) requirements include manufacturing and quality control (GMP), distribution (GDP), pre-clinical (GLP), clinical (GCP) and pharmacovigilance (GVP). As our products are also sold outside the EU, we make sure that our operations are in compliance with the good practices applicable in all those countries as well.

As the manufacturer and the marketing authorisation holder, we are responsible for the quality and safety of our products and for making sure that we follow these good operating practises. At the moment we have 300 employees working in quality assurance to ensure patient and consumer safety in proprietary, generic and self-care products.

The Finnish Medicines Agency Fimea is the authority that inspects pharmaceutical and active pharmaceutical ingredient (API) plants in Finland according to the Pharmaceutical Products Act, and on behalf of the authorities of other EU member states. The Mutual Recognition Agreement between the USA and the EU provides a possibility for the Food and Drug Administration (FDA) in the USA to also rely on inspections performed by Fimea. Moreover, healthcare authorities from many other countries frequently inspect our operations.

Ensuring safety in the beginning of the product lifecycle

We monitor safety throughout each of our products' lifecycle. Our quality management system ensures that each product batch released for sale is in accordance with marketing authorisation, and we systematically follow the outcomes of quality and safety monitoring. In events that cause concern, we instantly carry out the necessary procedures to ensure patient safety.

The research and development phases are the basis for ensuring quality of a medicinal product or API. The manufacturing methods and equipment as well as the requirements for the raw materials and the products itself are determined during these phases.

Industrialisation is included as an elementary part in the product development phase. The purpose of industrialisation is to make sure that the manufacturing methods are applicable on an industrial production scale and that each production batch corresponds to the product described in the marketing application.

The launch of a new proprietary product in the market is preceded by extensive phased research that delineates the drug's pharmacological properties, such as its efficacy and safety. Clinical trials involving human subjects can only be conducted with the approval of the regulatory drug authorities. The pharmacology and safety of a drug candidate are extensively studied using preclinical laboratory models and by monitoring tolerability and adverse effects throughout the clinical trials.

Our responsibility goes wider than just the products we launch ourselves. We are responsible for all products under our marketing authorisation, whether it is produced in our own production facilities or by a supplier.

We purchase our materials and ready-made products from suppliers whose qualifications we have confirmed. We expect our suppliers to operate in accordance with the Good Practices (GxP) requirements. Audits of their manufacturing sites are important steps in the process of selecting and monitoring our raw material and product suppliers, as well as in ensuring the continued availability and consistent quality of the raw materials and products and the traceability of the documentation. In the qualification process for API suppliers, we also audit the manufacturers of the intermediate materials used in the manufacturing process of the API.

Ensuring quality in our production

Each batch of raw material is sampled, analysed and released for use by our quality organisation before use in production. Packaging materials and the printed packaging information are also checked accordingly. In-process samples are taken during the manufacturing process to ensure the consistent quality of the product. Samples of each manufactured batch are taken and analysed, and the batch documentation is reviewed before it is approved for sale.

In the approval process, we check that the batch has been manufactured in accordance with the marketing authorisations granted for the product by the authorities in different countries and that all the results of the analysis meet the requirements confirmed in the authorisations. When releasing products for sale, we use even stricter internal quality criteria in order to ensure the required quality throughout the entire shelf-life of the product.

With the help of the batch documentation, all the materials and the phases of manufacturing, quality control, transportation and distribution can be traced without gaps. This traceability is important if there is reason to find out if a potential manufacturing deviation from the specification has occurred. We also follow the stability of each product in stability studies through the labelled expiry date of the product.

The quality management procedures for APIs are described in the control strategy. The quality control methods are established at an early stage when the multi-staged manufacturing process is being developed, whereby the purity profile and the corresponding quality requirements for the ingredient are determined. The quality of the API is monitored throughout the manufacturing process, and all batches are analysed before they are released for sale.

Monitoring quality and safety via pharmacovigilance

At Orion, we ensure that our products provide the effective treatment defined in the marketing authorisation. We continuously monitor quality and any adverse events that may arise during the development and the use phase of the drug. If any such event comes to our attention, we make immediate investigations and corrective actions accordingly.

We work to ensure the safety of our products throughout their lifecycles. We aim to ensure that the benefits of using a medicinal product significantly outweigh any possible risks or adverse impacts related to the use of the product. We maintain a pharmacovigilance system, which is required by legislation, and regulatory requirements in order to monitor the safety of our medicines and to implement timely and effective risk mitigation actions when appropriate, to ensure patient safety.

All customer complaints concerning our products are assessed, and the root causes are investigated. We handle complaints via a centralised process, which enables us to efficiently monitor complaints throughout the entire lifecycle of a product. This also facilitates the monitoring of the impacts of corrective and preventive actions.

Pharmacovigilance operations

Our duty is to monitor the safety of our medicinal products throughout their lifecycles, right from the early phases of R&D up until the product is no longer available on the market. This is done via pharmacovigilance, the science and practice of monitoring the effects of medicinal products after they have been licensed for use, especially in order to identify, evaluate and prevent previously unreported adverse reactions.

Several functions of our company are involved in the pharmacovigilance processes coordinated by the Global Drug Safety organisation situated in our headquarters. Qualified and trained experts are responsible for assessing and carrying out the

activities related to managing the benefit-risk balance of the products. Our pharmacovigilance operations and quality management system are compliant with international regulatory requirements and guidelines.

The core activities in the pharmacovigilance operations also include risk management, safety reporting to healthcare authorities, various periodic safety reviews and internal audits of pharmacovigilance activities.

We prepare a Risk Management Plan (RMP) for all new medicines, which describes what is known and not known about the medicine's safety and states what measures will be taken to prevent or minimise its risks. The authorities approve the RMP, and the measures agreed in the RMP are implemented when the product is placed on the market. The measures are product-specific and can include, among other things, additional materials or educational programmes for healthcare professionals to ensure the safe and correct use of the product. RMP is maintained throughout the lifecycle of the product.

All data concerning the safety of our products is collected into a centralised assessment, and continuously monitored and reported. Information is collected from various sources throughout the product lifecycle, such as from clinical trials, spontaneous reports and feedback from healthcare professionals, literature, regulatory authorities and patients regarding any adverse effects, medication errors, interactions or overdoses.

We collect product safety information worldwide and report it to the relevant regulatory authorities. Both we and the regulatory authorities evaluate the information to detect safety signals that might affect the benefit-risk balance of the products to identify any emerging safety issues at an early stage. In addition to continuous signal detection procedures, we periodically review the cumulative data. These Periodic Safety Update Reports are prepared and submitted to the regulatory authorities. In the report, all available safety information and the benefit-risk profile of the product are thoroughly evaluated and measures to minimise risks are proposed, if necessary.

We work in close collaboration with authorities in evaluating the safety of our products and on the balance between risks and benefits. When necessary, we take action to ensure patient by, for example, updating the information provided in the summary of product characteristics and the package leaflet, providing information or training to healthcare professionals, adding contraindications, precautions or warnings to the product information, or discontinuing sales. The possible actions are always taken in a controlled manner in collaboration with healthcare authorities.

Since January 2018, customers have also been able to contact the Orion call center and talk about their products with experts at the weekends and outside office hours, and ask about Orion's products or report any adverse events or make a complaint about products when needed. The call centre is open every day of the year between 08:00 and 22:00. 24/7 reporting is also made possible using easily accessible reporting and contact forms on our web pages, which have been further developed to ensure easy use and to comply with GDPR related requirements.

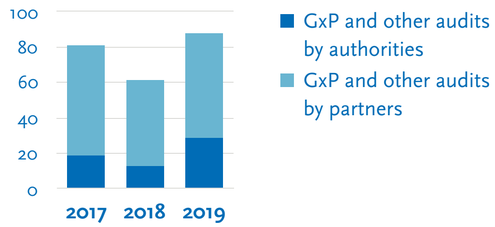
Audits to ensure operational quality

Manufacturing and sales of medicines and APIs are subject to regulatory permissions. During the authorisation procedure, the regulatory authorities have ensured that Orion has the appropriate qualities for the operations, and that each drug we release meets the specified requirements. The regulatory authorities conduct regular inspections to monitor and assess our research, supply chain and pharmacovigilance operations. In these inspections, they also assess our effectiveness to follow up any adverse effects of our products, our processing of complaints and our readiness to recall a product from the market.

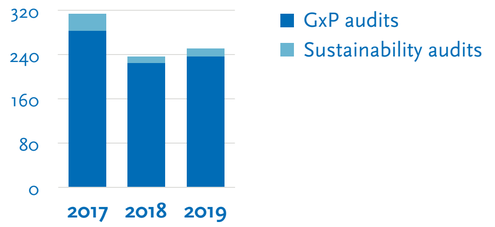
The inspections are conducted in the name of the medicinal authorities of the EU and other countries in the so-called PIC/S (Pharmaceutical Inspection Convention and Pharmaceutical Inspection Scheme) collaboration, which covers 49 countries. In addition, our operations are regularly monitored and inspected by authorities representing non-PIC/S countries.

We proactively ensure and monitor the adequacy and compliance of our operations and facilities by

Audits by third parties, pcs



Audits by Orion, pcs



means of internal control. We carry out systematic audits and management reviews of our operations and continuously develop our internal procedures.

Our customers, partners and contract manufacturing principals also assess our ability to operate in compliance with the regulations and the commitments agreed in the contracts. In their inspections and audits they check the adequacy and regulatory compliance of our supply chain and R&D of pharmaceuticals and APIs. Our customers also conduct sustainability audits to Orion's operations.

In 2019, Orion received one critical observation by a customer auditing us. Appropriate corrective actions were made promptly, which customer accepted with audit closure.

Correspondingly, we monitor the adequacy and regulatory compliance of our sub-contractors, suppliers and other collaboration partners. We collect self-assessments and carry out on-site audits to make sure that the external parties involved in our supply chain, R&D and distribution meet the regulatory requirements, such as the Good Manufacturing Practices, and obligations mutually agreed in the collaboration contracts. We also follow up corrective actions and preventive actions for audit observations.

The 238 GxP audits carried out by Orion in 2019 resulted to 9 critical observations and 5 rejections. The sustainability audits by Orion did not result to any critical observations nor rejections.

Recalling the product

We closely monitor any signals of eventual quality defects. Medicinal products and APIs that do not comply with their specifications or may cause harm to their users will immediately be recalled from sale and distribution, and from consumption if necessary.

Depending on the seriousness of the case, the product is either recalled from wholesalers and retailers only, or also from patients. We take similar measures if there are deficiencies in the integrity of the data in the manufacturing documentation. The decision to recall a product is made in cooperation with the health authorities.

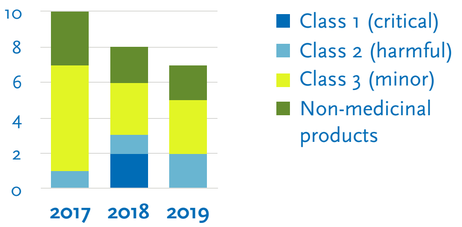
We have internal processes to ensure immediate initiation of recalls, prompt and accurate communication and efficient processing in such cases. We also regularly test the efficiency of our recall procedures. All of our employees are obliged to inform the local person responsible for pharmacovigilance about any adverse effect events of which they have become aware. In addition, our phone operators forward any queries requiring urgent action to our experts, even outside of office hours.

Product recalls in 2019

During 2019, there were in total seven product recalls.

Recalls of medicinal products	Losartan tablets and Losartan/Hydrochorothiazide tablets were recalled due to detection of trace amounts of nitrosoamines. Nitrosoamines were formed during manufacture of active substance. A batch of Digoxin 0.25 mg/ml was recalled from wholesaler due to stability issue detected with a new, more specific analytical method. Enanton Depot Dual 3.75 mg , 11.25 mg and 30 mg tablets were recalled from wholesaler due to glueing problems of tamper evident stickers of the package. Melatonin 3 mg tablets were recalled as the package code was not completely readable. Mitostat 20 mg infusion concentrate was recalled due to deficiencies of the active ingredient manufacturer´s documentation.
Recalls of non-medicinal products	Melatonin 1mg spray was recalled due to microbiological growth Wind and cold cream was recalled due to changes in product consistency.

Product recalls, pcs



Defects identified in medicinal products are classified as critical, major or minor, depending on the degree of severity.

Class 1 (critical): product defects that are or may be life-threatening or pose a serious health hazard to users.

Class 2 (major): product defects which may be harmful to the users or may affect medical treatment but which are not included in Class 1.

Class 3 (minor): product defects which are not likely to pose a significant health hazard to the users, but where the removal of the defective product from the market is otherwise justified.

Medicine information

At Orion, we look after patient safety by sharing accurate and up-to-date information about the use, storage and safety of our products via our own marketing and corporate communication channels. This is done to the extent permitted by law and the commonly adopted industry codes.

Pharmaceutical products may only be sold and used under a product-specific marketing authorisation granted by a pharmaceutical regulatory authority. A summary of product characteristics determines the facts shared with healthcare professionals and included in product-specific package leaflets.

Marketing authorisation is granted and maintained to be valid for products that are safe to use for their indicated purpose, are proven to be therapeutically effective, appropriate for use as drugs, meet quality requirements, and are appropriately manufactured and labelled. The authorisation also defines the product's indication – i.e. the purposes for which the medicine can be used.

The drug and health authorities maintain national and international drug databases, which contain up-to-date information for every product with a valid marketing authorisation. The information and arguments presented by the manufacturer and/or the marketer in any communication about the product must always fully conform with the registered product information for the valid marketing authorisation.

For the sale of an API, Fermion shall provide its customers with registration materials (DMF, ASMF, CEP[1]) approved by regulatory authorities which form part of the marketing authorisation documentation concerning the medicine in which the API acts. For each batch, the customer shall receive the related supply documents, an analysis certificate and a safety data sheet concerning the substance. All packages are labelled with warning signs and traceable information.

Fighting falsified medicines via serialisation and anti-tampering

Falsified medicines pose a serious challenge globally. They have not been checked for quality, safety or efficacy. They are often disguised as authentic medicines, but may contain ingredients of substandard quality or may come in the wrong dosage. In Europe and Finland, falsified medicines are not currently a significant problem, but preventative actions are being taken proactively.

To prevent the entry of falsified medicinal products into the legal supply chain, the EU Falsified Medicines Directive came into force in February 2019 across Europe. Regulation requires that medicines released for sale after 9 February 2019 contain certain mandatory safety features: the unique identifier (serial number and product code) and an anti-tampering device on the pharmaceutical package. Serialisation requirements are already in force in many countries, for example in China, the USA, South Korea, Saudi Arabia and Turkey.

Serialisation across the European pharmaceutical market means that all individual prescription medicines must be traceable throughout the value chain. In practice, all pharmaceutical packaging must include a unique identifier so that a sales package can be traced all the way back to the production plant and production line. In addition to including a serial number and a product code, prescription medicine packaging is sealed, so that the customer can be sure that the packaging has not been opened.

The EU Directive concerns all prescription medicines for human use; therefore, non-prescription medicinal products and veterinary medication are not under the directive.

Orion has been preparing for the serialisation requirements for several years. All of our packaging lines have been updated in order to comply with the directive, and the entire supply chain has been successfully verified. New serialised products are being manufactured and delivered to pharmacies continuously. We will continue to implement this regulation, and ensure our products comply with it and similar existing and upcoming requirements in other markets.

In addition, Orion aims to take actions against counterfeit products when needed to minimize the threat to public health and help ensure the integrity of Orion products. It is Orion's goal to understand the needed steps to recognize and avoid counterfeit products. This is done by building a robust trademark portfolio and other protective legal measures.

Avoiding availability challenges

We aim for maintaining a high level of service at all times. In 2019, the availability of Orion's pharmaceuticals was around 97% in Finland. The service level has been at a competitive level in 2019 compared to other pharma companies, despite the fact that there have been a lot of availability challenges globally.

Such global challenges have been caused by, among other things, the consolidation of API manufacturing capacity. That can lead to certain active pharmaceutical ingredients or excipients to have very few or even only one manufacturer globally. There have also been delays in implementation of serialisation requirements by some of the partners that supply us with finished products.

[1] DMF = Drug master file
ASMF = Active substance master file
CEP = Certificate of suitability

At Orion, we proactively evaluate potential risks throughout the value chain and take necessary actions in order to mitigate them, in order to secure product availability. One of the key elements of risk management is having close and systematic collaboration with all of our main suppliers. The collaboration aims to mitigate risks and ensure expected service level together with the entire supply chain, and according to commonly agreed targets with suppliers.

We also minimise the risk of capacity shortage in the distribution of medications by ensuring the availability of alternative means of distribution.

MANAGEMENT OF PATIENT SAFETY

MANAGEMENT APPROACH	Patient safety as our guiding value and fundamental priority. Integrated to all functions and processes throughout the value chain.
POLICIES AND COMMITMENTS	Relevant legislation and regulatory authorities' instructions. Guidelines and principles determined in our Pharmaceutical R&D Ethics Policy and internal guidelines (conform to the WMA Declaration of Helsinki and internationally adopted codes of our industry).
GOALS AND TARGETS	To ensure patient safety and the reliable supply of medications.
RESPONSIBILITIES AND RESOURCES	• Chief Medical Officer: carries the primary responsibility for the Company's medical governance and medical ethics. • Global Medical Affairs, in collaboration with the Global Commercial Operations: responsible for our compliance with the legal requirements concerning the marketing of pharmaceuticals in all countries where we are present. • Qualified Person responsible for pharmacovigilance (QPPV) (in Orion Director, Global Drug Safety): responsible for the establishment and the maintenance of the pharmacovigilance system of the marketing authorisation holder. • The Accountable Director (in Orion Vice President, Quality Management): primarily responsible for our medicinal products being manufactured the correct way and that the quality requirements are being met. Qualified Persons in our Quality Assurance organisation: review all data for each product batch before product release and certification to ensure that the batch fullfills all requirements as defined in marketing authorisation and the GMP. • The Accountable Director at Fermion: primarily responsible for active pharmaceutical ingredients being manufactured the correct way and that the quality requirements are being met. Active pharmaceutical ingredient batches released for sale by independent Quality Assurance departments at each of Fermion's production sites.
GRIEVANCE MECHANISMS	Monitoring of the safety of products, feedback collected from customers, benefit-risk assessments carried out throughout the product life cycle. Adverse events, quality complaints or other product related safety problems reported through Orion's global pharmacovigilance and quality operations at HQ, locally through subsidiaries and wholesalers and through licensing partners globally. All employees obliged to inform the Global Drug Safety function about any adverse effect events they have become aware of.
EVALUATION OF MANAGEMENT APPROACH	The health authorities monitor and assess our R&D, supply chain and pharmacovigilance operations. Our operations frequently inspected in the different countries our products are used. • Our customers and partners audit us • We audit our subcontactors and suppliers • Internal inspections • Management reviews as an integral part of our quality system

Environment

Manufacturing products in an environmentally sustainable way

At Orion, we invest in environmental responsibility throughout the product lifecycles. The most significant environmental impacts of our operations arise from the use of materials, energy and water. The emphasis of environmental management is on the efficiency of materials and energy use, emissions into air, wastewater and the procedures for selecting and managing suppliers and partners.

Reducing pharmaceutical residues

At Orion we focus our particular attention to the drug residues in the environment.

Pharmaceuticals may end up in the environment in various ways, due to effluents from manufacturing facilities, medicines consumed by patients and then excreted, or the improper disposal of unused and expired medicines.

At Orion, we evaluate the potential environmental impact of our products with lifecycle thinking, starting with the product development stage. We conduct an environmental risk assessment on all new products, as required for market access, to identify any risks that the substances included in the products could cause when released into nature, and ways to prevent these risks in our own operations. We are constantly assessing the environmental impacts of our manufacturing activities, and when manufacturing active pharmaceutical ingredients, green chemistry is the aim. Shortening and lightening the processes related to pharmaceutical production also reduce the amount of chemicals used.

Reducing the environmental impact of the production of pharmaceuticals and controlling risks at factories is essential. We have succeeded in reducing our pharmaceutical residues from production significantly by developing its wastewater management system.

This process is based on a separate drainage system, in which wastewater containing compounds unsuitable for a biological treatment plant or posing a risk of environmental impact are separated from the rest of the wastewater. The high-risk wastewater is directed to special tanks and treated as appropriate. The extra water is evaporated as efficiently as possible, and the residues are incinerated responsibly as hazardous waste.

Being responsible does not just mean continuously improving our own operational site processes but also being committed to rigorously managing and monitoring the sustainability of our global supply chain. We have set strict requirements ensuring that materials are only purchased from responsible suppliers. Pharmaceuticals in the environment is one criterion considered in the procurement process. We do this through assessment questionnaires, by undertaking risk-based sustainability audits, and by ensuring that necessary corrective actions are agreed upon with suppliers and followed up afterwards. Further information about our responsible supply chain management is available in the **Sustainable global supply chain management** section of this report.

Most of the pharmaceutical residues in the environment are caused by the use of medicines. They end up in the environment as excretion and via wastewater from showering. Our key focus is to provide patients with effective and safe medicines in the right way when they need them. Medicines only help patients if they are taken according to a prescription by a healthcare professional. The issue is complex: medicines are an integral part of the well-being of people and animals, but they clearly impact the environment.

Enhancing the proper use of medicine

Guidance and advice are important from an environmental point of view, as the proper use of medicines entails reducing misuse or unnecessary use. Our sales professionals and other personnel advise healthcare professionals to ensure that products are used correctly. They also advise healthcare professionals, for example, to prescribe new medicines using smaller packages, which reduces the amount of drug waste from unused medicines. We can use our influence to encourage the responsible use of medicines and reduce the amount of drug waste.

DRUG RESIDUES

88%

FROM CONSUMPTION

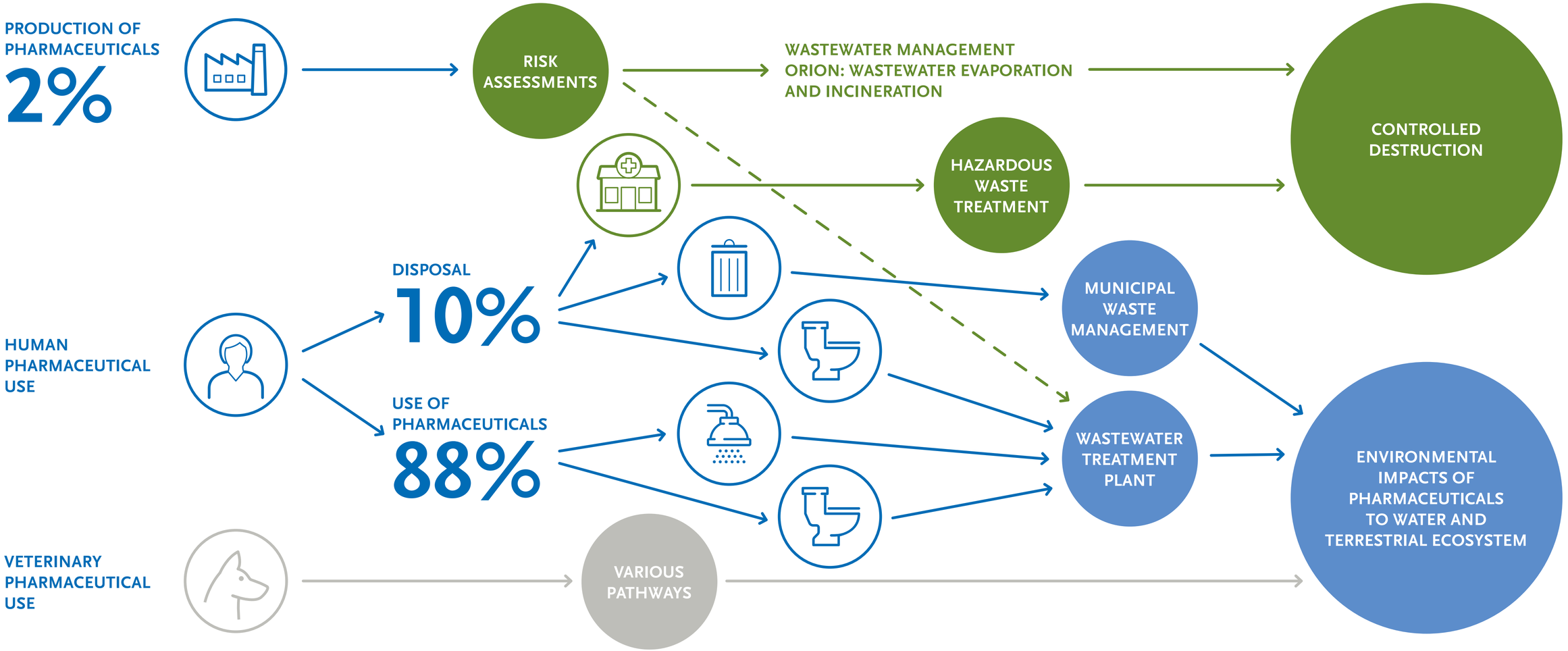
10%

FROM INCORRECT DISPOSAL

2%

FROM PRODUCTION

Pharmaceuticals in the environment



In addition, Orionees working with package design take the size of packages and the shelf life of products into consideration to reduce the amount of unused or expired medicines. The packaging prevents the drug from being released into the environment. It also contains important information about the drug, how to use and store the product and instructions for the proper disposal of medicines.

Expired or unwanted products should be returned to the pharmacy to be disposed of properly. Improper disposal will create a major environmental load. This is why we want to have an impact on this phase of a product's lifecycle and aim to increase consumer awareness on the matter. To do that, we cooperate with pharmacies and other healthcare professionals. In 2019, we reran the Lääkkeetön Itämeri campaign (Drug-free Baltic Sea) to raise the awareness of the importance of returning the expired or unwanted medicines to the pharmacies for proper disposal.

Also veterinary use is a source for pharmaceuticals in the environment. Antibiotics are life-saving medicines and the cornerstone of managing bacterial infections, but widely overused and misused in both people and animals. Inappropriate use of antibiotics leads to antimicrobial resistance (AMR). As a result, antibiotics become ineffective and curing previously treatable infections becomes difficult. The WHO characterises AMR as one of the biggest threats to public health in the world today.

Our work to reduce the drug residues in the environment applies to antibiotics as well. In this context and to fight against antimicrobial resistance we have a useful product on the market. For poultry, Orion's portfolio includes Broilact®, a unique Competitive Exclusion (CE) product providing a refined selection of bacteria that establish and develop a healthy adult-type microflora in the intestines of chickens, turkeys, geese, pheasants, quails and partridges. Increased awareness and the restrictions on antibiotic use in poultry have increased the interest in this product.

Awareness, skills and tools have developed significantly over the last 10 years. Orion continuously develops its own expertise in the area of pharmaceuticals in the environment. We collaborate with stakeholders to share knowledge, learn from others and develop solutions. We are taking part in the SUDDEN project (Sustainable Drug Discovery and Development with End-of-Life Yield), which is a multidisciplinary research consortium dedicated to reducing the environmental impact of pharmaceuticals and supporting sustainable growth in the pharmaceutical industry. In addition, we are the main partner of John Nurminen Foundation's Clean Baltic Sea projects in 2018–2020.

Ensuring effective EHS management

Effective EHS management is the key to ensure continuous improvement on environmental performance of our operations through more efficient use of resources and reduction of waste. The Group's EHS (environment, health and safety) policy determines our commitment to the well-being of the environment. EHS management system guides our operations in all production sites. We have clear procedures for operating our EHS management system and for predicting, preventing and observing exceptional events and situations and for taking corrective action.

We have regular EHS risk assessments for the identification of potential shortcomings and nonconformities. We have an overall assessment of the EHS and energy management systems by the Group management in annual management reviews. We have development programmes with objectives, action plans and progress monitoring. We collect data systematically and evaluate items within the scope of the EHS and energy management systems.

We hold regular internal EHS audits, and we have sustainability audits conducted by regulatory authorities and our collaboration partners at our sites. We also receive notifications and concerns regarding environmental harm and safety from instances outside our company, such as collaboration partners or neighbours.

Our EHS information system records observations, follows up with corrective action and shares information across the organisation. It gathers information on safety and environmental observations, injuries, audits and inspections as well as on corrective action related to these notifications. The system aims to bring forth a consistent EHS operating model for the whole group.

Orion continuously develops its own expertise in the area of pharmaceuticals in the environment.

By observing our operational environment, we can prevent hazardous situations and improve our performance. Some 3,000 safety and environmental observations are made each year at Orion, and we have become more and more active over the years.

Use of materials in our production

We know the most central material flows in our production operations and identify the items in need of development in order to minimise our waste flows. We forward our recyclable surplus materials for further recovery.

The reported use of materials includes the substances and materials used by our own operations for pharmaceuticals and active pharmaceutical ingredients (APIs), and part of the materials used in R&D. The use of materials is primarily dependent on the production volumes of finished products, but also affected by improvements in the manufacturing process and the amount of semi-finished products and intermediates sourced from external suppliers.

Fermion, which manufactures active pharmaceutical ingredients in chemical processes, uses most of our direct manufacturing raw materials. Fermion accounted for 84 % of the group's total consumption of direct materials (excl. packaging materials) in 2019. Solvents account for the largest share (45%) of the total volume of materials used in the group's production operations.

In the process of manufacturing medicines in Espoo and Turku, the main solvent is ethanol, and most of it is used in tablet-coating processes and in the production of tablet masses. Additionally, several tonnes of isopropanol is used in Turku. A considerable proportion of solvents is used in the manufacturing of hormonal products.

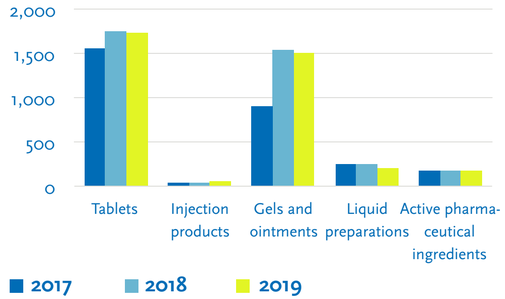
Reusing materials in our production

Regenerated solvents comprise the only relevant reusable materials in the Orion Group. Solvents are regenerated and reused by Fermion. Both Fermion's Hanko and Oulu plants retain some of their solvents and regenerate them in their distilleries. The Oulu plant reuses the regenerated solvents in its production processes, whereas in Hanko, part of the distillate is used as fuel in the plant's VOC combustion facility and thereby as an energy source for API processes. In 2019, regenerated solvents accounted for 36% of the Group's total solvent consumption.

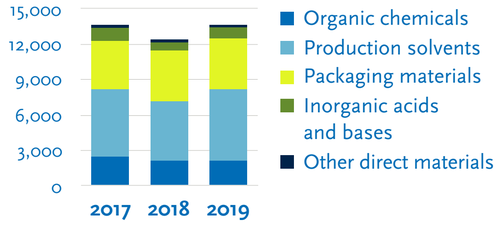
Our ability to use recycled auxiliary and excess materials in our own manufacturing processes is practically limited to Fermion's solvents, due to strict requirements concerning the quality, composition and purity of the materials used in the manufacturing of medicines.

The purity and safety requirements also concern packaging. Usable materials that definitely do not contain residues of active ingredients are recycled.

Production volumes, tonnes



Materials use, tonnes



CASE

How to make sustainable packaging for pharmaceutical products

The main role of pharmaceutical product packaging is to protect the packaged pharmaceutical product on its journey from the manufacturer to the patient. In terms of sustainability, the ideal packaging protects the medicinal product, is fit-for-purpose, saves resources and minimises environmental impact across the value chain. Still, ensuring patient safety and the reliable supply of medications are the main sustainable objectives the packaging has to fulfil.

Developing packaging material and looking for more sustainable solutions is an ongoing task we enact at Orion every day.

The most important function of primary packaging is to protect the medicinal product from chemical, climatic, biological or mechanical hazards that may lead to product loss or deterioration. The packaging also prevents the medicinal products ending up in the environment.

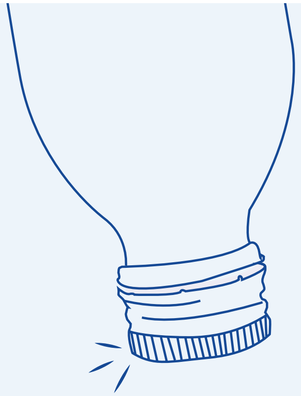
As a pharmaceutical company, we follow the regulatory guidelines of pharmaceutical packaging within target markets but also have internal functions to ensure the safety, quality and suitability of the product packaging. All of our product packages are designed to meet the internal, regulatory and legislative requirements for packaging while ensuring functionality in consumer and patient use.

To ensure the safe use of a medical product, name, strength and dosage and other critical information about the medicinal product are presented on the carton and/or label. The packaging usually contains a patient instruction leaflet describing in detail how to use the medical product and what precautions must be taken into account. The carton is also printed with batch numbers, manufacturing date and a serialisation number, both for patient safety and to enable tracking and tracing of a specific product.

We take usability into account while designing packaging solutions. Some of our product packaging contains child-proof closures or closures that help the opening process for the elderly and rheumatic patients. We also include braille in each carton to help visually challenged patients.

Optimising performance, costs, raw materials and energy use

Orion has harmonised the carton sizes of various product packaging to save resources and optimise the supply chain of packaging materials. The thickness of the material has been optimized to save resources. Harmonised packaging sizes also reduces the space used for transportation and warehousing.



In some products, we no longer use the carton secondary packaging, as for some products the plastic jar provides enough protection by itself, and all the necessary product information for safe use can be printed on the label.

Sustainable design takes end-of-life of packaging into account

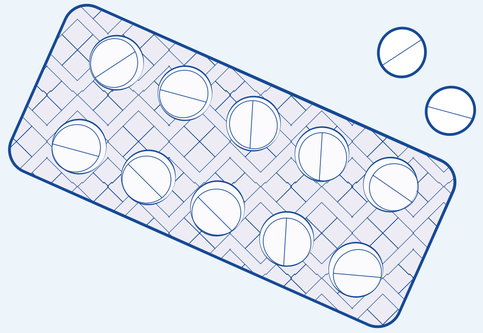
When changing existing packaging, we also have the possibility to upgrade the design and make improvements. For example, some plastic inner parts of packaging have been changed to carton materials.

Packaging materials can serve as a valuable resource after the medicinal product has been consumed. Our aim is for our packaging materials to be designed to enable easy sorting and recycling by consumers. We continuously increase awareness among consumers and healthcare professionals on the appropriate ways to recycle and dispose of product packages and medicinal products.

Working together for future solutions

We work actively to seek new innovations and solutions for pharmaceutical packaging. Our teams of experts and suppliers regularly come together to discuss, plan and implement new type of packaging solutions and define what sustainability in packaging means for Orion.

In addition, we are taking part of the Sustainable Drug Discovery and Development with End-of-Life Yield project (SUDDEN). One part of the project focuses on the replacement of polyvinyl chloride (PVC) in pharmaceutical blister packaging.



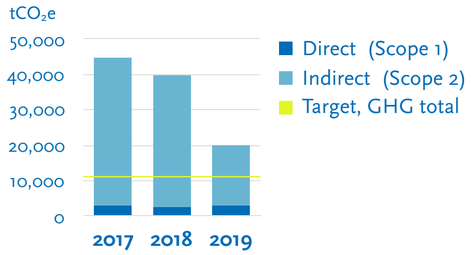
Targeting energy efficiency

At Orion, our aim is to improve the efficient use of energy and reduce our energy consumption by applying the practices determined in our energy management system. We share best practices from across the Group, and aim to take the advantages of excellent solutions by applying them at other locations where applicable.

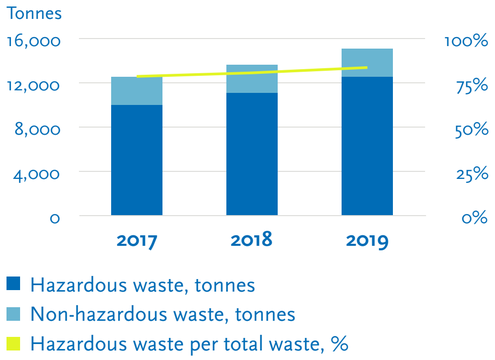
We are committed to the joint Energy Efficiency Programme for the members of the Confederation of Finnish Industries (EK). The programme is based on the strict requirements of the EU Energy Efficiency Directive, and the savings target for 2025 is 7.5% of energy consumption in 2016, the intermediate target being 4% for 2020.

For us, this means a saving of slightly over 12 GWh, 51% of which was achieved by the end of 2019. The energy savings of 1,422 MWh were achieved through the savings measures and by improving energy efficiency at every site in Finland. At the Hanko, Kuopio, Salo and Turku sites new LED lighting was installed. At the Oulu site, we installed a new steam heat recovery system – we now warm our premises and domestic hot water with the heat that was previously wasted. This project was rewarded by the Ministry of Economic Affairs and Employment, the Energy Authority and the state's Sustainable Development Company Motiva with title of 'Energy Genius of the year'.

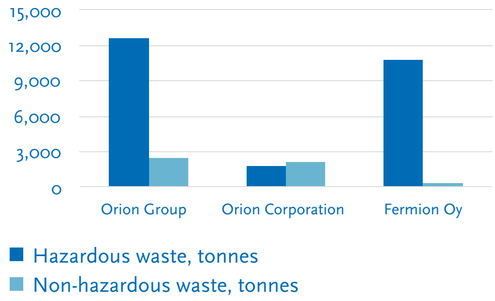
Greenhouse gas (GHG) emissions, tCO_2e



Waste, tonnes



Waste by reporting units in 2019, tonnes



Reducing emissions to combat climate chance

We contribute to combatting climate change by reducing our greenhouse gases and volatile organic compound (VOC) emissions. We have set an ambitious target of reduction of our greenhouse gas emissions (Scope 1 and 2) by 75% for 2025. In 2019, we took a major step towards our target by transitioning to using renewable electricity in all of our Finnish locations. This resulted in a 55% decrease in our greenhouse gas emission. We are currently developing a roadmap that will help to further reduce and reach our greenhouse gas target.

Strict limits concerning volatile organic compound (VOC) emissions from the use of solvents are set in the local environmental permits for our manufacturing plants.

Fermion, which accounts for about 96% of our total consumption of solvents, successfully controls its emissions. In Oulu, VOC emissions are treated in a facility which operates according to cryogenic principles, in which the vaporised solvents are recondensed into liquid form by means of liquid nitrogen. In Hanko, VOC emissions are treated by our partner

The VOC emissions from the pharmaceutical manufacturing operations in Espoo and Turku mainly originate from ethanol, which is used as the primary solvent in tablet-coating processes and in the manufacture of tablet masses. In 2019, we managed to improve the efficiency of our gas scrubbers significantly, reducing the VOC emissions from Espoo. We also implemented a new automatic tool for calculating the VOC emissions from Turku and Espoo, improving the accuracy of the calculations.

Processing waste in a responsible manner

Waste in all forms is an important aspect of our efforts to reduce our environmental impact. Our aims are aligned with the priority targets specified in the EU waste strategy, which are included in the Finnish Waste Act. These priorities include reducing the amounts of waste generated and recycling waste materials. Waste that cannot be re-used as material in our own operations is delivered to an appropriate third party to be used in another way whenever

Waste by type and disposal method, tonnes

		2017	2018	2019
Hazardous	Materials recovery: reuse, recycle, composting, recovery	104	4	37
	Energy recovery	39	5	3
	Incineration, mass burn[2]	9,863	11,172	12,592
	Landfill	0	0	0
	Other[1]	0	0	0
	Total hazardous waste	**10,006**	**11,182**	**12,633**
Non-hazardous	Materials recovery: reuse, recycle, composting, recovery	1,510	1,764	1,710
	Energy recovery	1,062	745	687
	Incineration, mass burn	19	30	94
	Landfill	0	4	0
	Other[1]	0	0	0
	Total non-hazardous waste	**2,592**	**2,543**	**2,490**
	Total waste	**12,598**	**13,725**	**15,123**
	Share of hazardous waste	**79%**	**81%**	**84%**

[1] Other includes deep well injection, on-site storage and all other means

[2] Hazardous waste incineration includes waste streams that are pre-treated by evaporation before incineration

Waste disposal methods have been provided by the waste disposal contractors. The scope of waste reporting includes own production and operations in Finland.

possible, such as for energy recovery. The amount of waste sent to landfill is kept to a minimum.

In the manufacturing of pharmaceuticals, the tolerance for errors and defects is zero. A batch which fails to meet the specified requirements concerning quality and standard operating procedures is hazardous waste, and all input resources consumed in its production – materials, energy, time and labour – are lost. Therefore, it is essential to manufacture our products right the first time.

Most of the Orion Group's waste is hazardous, and most of it comes from Fermion, which produces active pharmaceutical ingredients at its plants in Hanko and Oulu using synthetic methods of organic chemistry and handling great amounts of raw materials. Almost all waste from Fermion's processes is hazardous because it contains active pharmaceutical ingredients or other chemicals.

Hazardous waste also results from the manufacture of medicines, because those materials that contain or may contain active pharmaceutical ingredients or other chemical substances classified as hazardous shall be treated as hazardous. Typical materials treated as hazardous waste include drug waste, organic and inorganic chemicals and mixtures classified as hazardous or harmful, cytostatic, and carcinogenic among others. We make sure that our hazardous waste materials are given appropriate further treatment, during which process they are made safe for both people and the environment.

In the pre-treatment processes, our partner sorts out those fractions of our hazardous waste that can be recycled for further use, such as accumulators, batteries, refrigerating equipment and electronic equipment. Our partner incinerates our hazardous waste at its Riihimäki treatment facility, specialised in the destruction of hazardous waste at extremely high temperatures. Most of our hazardous waste generates heat in the incineration process that is utilised as energy for district heating system in the Riihimäki region. The exact value of the distribution of the heat is hard to determine, but it is estimated that at least more than a quarter is pure solvents with a high heat value. These fractions are reported in the category of "incineration, mass burn" of hazardous waste.

Some of our hazardous waste, especially waste fractions with a high water content, is sent to physical-chemical pre-treatment. These fractions are pre-treated by evaporation before incineration.

The manufacturing processes of pharmaceutical products and APIs differ very much from each other, and the waste amount and types generated also differs accordingly. Our pharmaceutical product manufacturing sites in Espoo, Turku, Kuopio and Salo mainly generate non-hazardous fractions that are recovered either as materials or as energy. A considerable part of all our non-hazardous waste consists of different kinds of packaging materials.

One of our strategic KPIs is the share of hazardous waste of our total waste. Our aim is to

reduce hazardous waste in particular, but also total waste. The share of hazardous waste has increased by 7 percentage points to 84% against the 2016 baseline despite the efforts made. The rise is mainly due Fermion's production changes towards more material and waste-heavy products.

In 2019, we evaluated the hazardous waste material flows and created different kinds of optimisation and project ideas. The focus of these upcoming projects is to pilot new processes and technologies that could help us to reduce generated waste and improve the quality of waste fractions in a way that could make them recyclable, elevating the waste streams according to the EU's waste strategy hierarchy.

Fermion's direct manufacturing material flows are many times higher than those involved in the manufacture of pharmaceutical preparations. Fermion's total waste increased by 14% and its share of the Group's total waste in 2019 was about 74%. Fermion's share of the entire Group's hazardous waste was about 86%. Fermion was able to recycle 2,160 tonnes of used solvents back to production, which accounted for 36% of the Orion Group's total production solvent consumption and 17% of total material usage.

Orion Corporation, comprising the pharmaceutical preparations business, accounted for about 26% of the Group's overall waste, with almost the same amount of total waste as in the previous year. The amount of hazardous fractions increased by 3%.

Monitoring our wastewater

We know the quality of our wastewater, and we reduce the environmental burden on waterways caused by our operational sites by minimising the residues of harmful chemicals in our wastewater. We do continuous work based on risk assessments to ensure the separation of wastewater streams that include non-biodegradable or otherwise environmentally harmful substances and treat them following BAT reference documents.

There are significant differences in the volumes of water consumed between our units and locations, due to the differing characteristics of their facilities and operations. All of the water we consume is taken from local municipal water supply systems and calculated from direct measurement from water meters. One of our sites also uses seawater cycle as cooling water, and its consumption is estimated from pumps usage hours.

Our production sites generate practically as much wastewater as they consume fresh water. The wastewater is led to municipal water treatment plants either directly or after neutralisation, where solids and substances with biochemical oxygen demand (BOD) or chemical oxygen demand (COD) are removed. No wastewater from our sites are directly conducted to natural waterways. The waters exiting the process of Fermion's Hanko plant are pre-treated in our partner's adjacent biological treatment plant, from which the treated water is conducted to the sea via the local municipal discharge pipe. No water is being recycled or reused by another organization.

Our approach and our commitments on water-related impacts of pharmaceutical residues is being described at the **Reducing pharmaceutical recidues** section of this report.

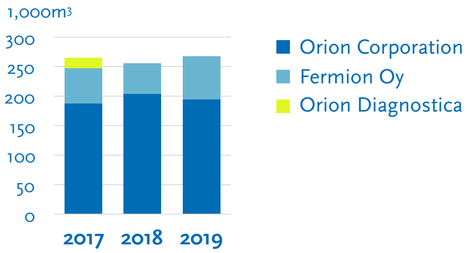
Wastewater discharges

	2017	2018	2019
Volume, m³	270,000	275,000	274,000
BOD, tonnes	200	149	230
COD, tonnes	391	254	379
TSS, tonnes	42	24	21
Nitrogen, tonnes	20	11	14
Phosphorous, tonnes	3	1	1

Environmental impacts of transportation and travel

The transportation of raw materials and products is being handled by external service providers. Currently we do not monitor or assess the environmental impacts of the transportation of raw materials or products, but in our procurement processes we set strict quality and sustainability requirements for our partners.

Water consumption in reporting units



All our waste is managed, controlled and treated appropriately.

The first product-specific life cycle assessment conducted in 2019 increased our knowledge of the environmental impacts of the different phases of product life cycle. The assessment results support us in defining our approach on how to minimise the environmental impacts of logistics and Scope 3 emissions.

CO_2 emissions from business flights, tonnes[1]

	2017	2018	2019
Flights in Finland	175	126	146
International flights	1,637	1,565	1,358
CO_2 emissions from business flights total	**1,812**	**1,691**	**1,504**

Approximately 140 employees in Finland had a company car as an employment benefit in 2019. The average length of time a company car remains in service is approximately four (three) years. The average CO_2 emissions of the entire fleet in 2019 was 126 (122) g/km.[2] The increase in the figure is due to the fact that the CO_2 emissions of all new company cars is calculated according to the new WLTP[3] calculation. However, we have not set a CO_2 emissions target according to WLTP.

In Espoo, we also provide our employees with the option of charging electric and hybrid cars at our parking lot. In 2019, 108,000 (108,000) kilometers were charged and 15.6 (14) tonnes of CO_2 emissions avoided.[4]

In 2019, we collaborated with the regional transportation authorities in Espoo and Turku. As a result, city bicycle stations where employees can rent and return city bicycles were set next to Orion's sites in Espoo and Turku, where approximately 70% of our employees are located.

Monitoring our environmental performance and investments

Measuring our performance is vital in managing sustainability. We have identified the most significant environmental aspects of our businesses and determined our approach to improve our performance in them. Monitoring and reporting our environmental performance for some items is obligatory based on requirements specified in the environmental permits. More importantly, gathering data and assessing indicators is a tool for us to improve our own performance.

We operate in compliance with environmental laws, permits and other environmental requirements. We aim for the highest standards in the industry with respect to the environment.

Location-specific environmental permits determine the acceptable maximum levels of emissions into the air, soil and water, as well as the methods and scopes for the measurement, monitoring and reporting related to environmental impacts.

We consider environmental factors, such as environmental risks, impacts and resource efficiency, when making investment decisions. Environmental investments are made at our operational sites on an annual basis, either with the primary purpose of reducing our environmental burden or as part of major upgrading and replacement investments carried out in accordance with long-term investment plans.

We made several environmental investments in 2019: projects for improving energy efficiency, the efficient and safe use of materials, consumption of water, and management of effluents, waste and emissions. Our environmental investments in 2019 came to about EUR 1.3 (0.4) million. In 2019, investments were especially related to improvements to energy efficiency in Oulu, Hanko, Salo and Kuopio.

In addition, our ongoing expences related to environmental protection resulted to EUR 5.6 (5.5) million. Costs include waste, wastewater, and the prevention of emissions into the air and ground, noise abatement, energy efficiency, environmental permits and improving of the environmental management in our operations in Finland. Waste management expenses were again the largest cost item resulting mainly from the controlled destruction of hazardous waste.

[1] Calculation of the CO_2 emissions:
Length of flight ≤ 590 miles: 0.24 kg CO_2 / mile
Length of flight > 590 miles: 0.18 kg CO_2 / mile
CO_2 emissions information provided by supplier.
The reported CO_2 emissions from business flights cover over 80% of employees.
Business flights arranged by other travel agencies for employees at our foreign locations cannot be reported.

[2] CO_2 emissions information provided by supplier.

[3] Worldwide Harmonised Light Vehicle Test Procedure. More information: **https://www.wltpfacts.eu/from-nedc-to-wltp-change/**

[4] Charged kilometres and CO_2 emissions avoided based on information provided by supplier.

MANAGEMENT OF ENVIRONMENTAL PERFORMANCE IN OWN OPERATIONS

MANAGEMENT APPROACH	Aim for the highest environmental standards in the industry. Identify the most significant environmental aspects of our business, mainly related to the consumption of raw materials, energy and water, emissions into the air and wastewater, and the waste arising from our operations.
POLICIES AND COMMITMENTS	Orion's EHS policy, Responsible Care -programme by the Chemical Industry Federation of Finland, Motiva Energy Efficiency Programme.
GOALS AND TARGETS	• GHG emissions (Scope 1 & 2) reduction of 75% by end of 2025[1] • Improve energy efficiency by 7.5% (12,000 MWh) by end of 2025[1]. Intermediate target to improve energy efficiency by 4% by end of 2020[1]. • Less hazardous waste per total waste. • Reduce the environmental burden on waterways by reducing the residues of harmful chemicals in our wastewater.
RESPONSIBILITIES AND RESOURCES	• Executive Management Board: responsible for EHS operating principles being followed at Group level. • EHS steering committee (headed by the Director for EHS and Facility Management): approves action plans and conducts management reviews for Orion Corp. • Fermion safety committee (headed by the EHS Manager of Fermion): approves and follows up action plans for Fermion Oy. • EHS virtual team: a group-wide forum of EHS-professionals. Team members responsible for the operational environmental activities. • Operational managers: responsible for operations in each location to be carried out according to the EHS management system and regulatory and legal requirements.
GRIEVANCE MECHANISMS	Online EHS information system for filing reports on environmental issues (available for all employees, enables anonymous reporting).
EVALUATION OF MANAGEMENT APPROACH	Systematic audits and management reviews of our own operations.

[1] Baseline 2016

Responsibility for Orionees

Responsibility for Orionees

Orion is an organisation consisting of over 3,000 highly educated professionals. We want to be a company that offers meaningful working opportunities in a well-managed and safe working environment in which people are treated equally and fairly. Our employees are encouraged to further their personal development. We believe that well-being at work results from collaboration and joint efforts.

Our shared company values

Orion is Finland's largest pharmaceutical employer and an international working environment for multi-talented people. Our workforce consists of people from many nationalities and cultural backgrounds, and is unified by the shared values and common Orion business culture. We offer the opportunity to work in an international environment and provide varied and challenging career opportunities for professionals in different fields. We are a responsible employer and keen on developing well-being at work and motivating our employees to further develop their competences. We offer our employees a healthy and safe working environment. It is important for us that Orion employees share the attitude of continuous renewal and feel that their work is meaningful. Healthy and competent employees enable us to bring value to our customers and to meet the strict requirements of the pharmaceutical industry.

All employees are building Orion's future as a team, in the spirit of our renewed values and by implementing our strategy. Our values were renewed in 2019 and employees were engaged in the renewal process. At the end of 2018, more than 2,000 employees completed a survey to collect feedback on Orion's culture and shed light on the values most common to everyone. To analyse the results, around 100 employees were involved with workshops to ensure better understanding of employee feedback. As a result of these discussions, new Orion values were introduced at the beginning of the year.

Implementing these values in 2019, we wanted to ensure that our employees embrace them and that they are reflected in the everyday work of our employees. The new values have been introduced to all employees in the form of line manager training, workshops, value discussions and a Value Day event. Value implementation will be continued over the course of 2020 and the will be monitored in pulse surveys to all employees.

Information on employees

Total number of employees by employment contract and gender

	Female	Male	Total
Permanent	1,804 (1,790)	1,275 (1,218)	3,079 (3,008)
Temporary	195 (169)	121 (108)	316 (277)
Total	**1,999 (1,959)**	**1,396 (1,326)**	**3,395 (3,285)**

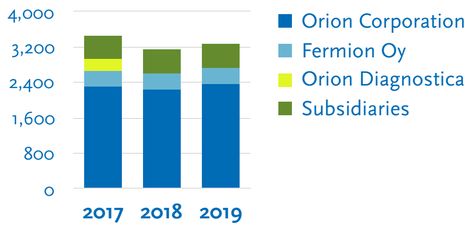
Calculations are based on employee headcount at Dec 31.

Total number of employees by employment type and gender

	Female	Male	Total
Full-time	1,802 (1,784)	1,313 (1,257)	3,115 (3,041)
Part-time	197 (175)	83 (69)	280 (244)
Total	**1,999 (1,959)**	**1,396 (1,326)**	**3,395 (3,285)**

Calculations are based on employee headcount at Dec 31.

Personnel by reporting unit[1]



[1] at Dec 31

Orion's values are:

Promoting equality and fairness

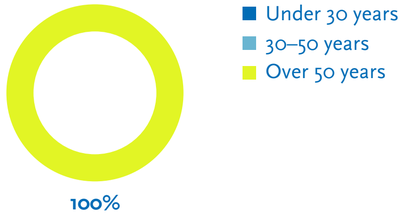
Orion's Human Resources Policy provides the framework for establishing equal opportunities plans in all countries in which we have operations, while observing local country-specific legislation. Our sites in Finland comply with the equality plan drawn up to support and promote equality at the workplace in recruitment, payroll systems, work-life balance and educational opportunities. When developing working conditions and operational practices, we observe the aspects of equality. The working group for the development of equality at our Finnish sites consists of representatives of all employee groups and the employer.

In our Finnish operations, salary equality is assessed using a salary mapping method as specified in the Finnish Act on Equality between Women and Men. The outcome of the mapping is reviewed and assessed by Orion's management and employee representatives and, when necessary, corrective measures are agreed upon.

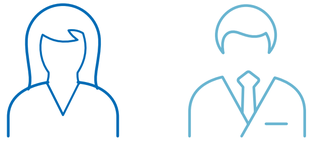
We take the opinions of employees into consideration in the decision-making process regarding human resources and when implementing decisions. In addition to mandatory employer-employee forums, our managers and HR department have regular informal meetings with employees and employee representatives.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES

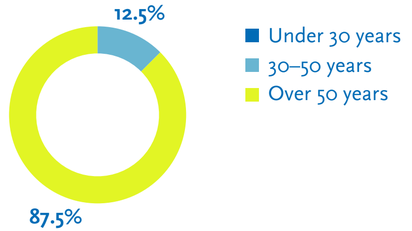
Board of Directors



Board of Directors



Orion Executive Management Board



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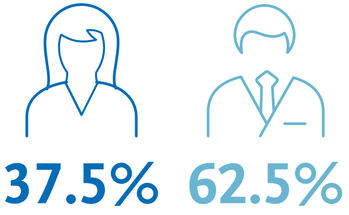
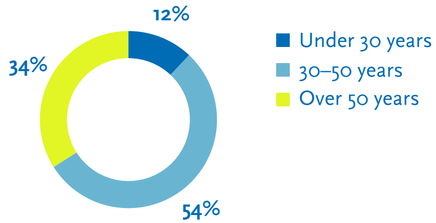
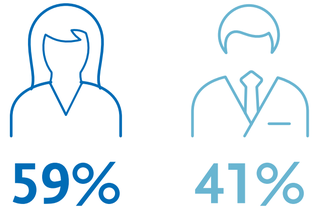


Personnel



Personnel



Calculations are based on employee headcount at Dec 31 2019.

Diversity of employees

	Female, %	Male, %	Under 30, %	30–50, %	Over 50, %	Total, %
Blue-collar	8,6 (8,8)	13,4 (13,6)	4,2 (4,3)	10,8 (11,4)	7,0 (6,7)	22,0 (22,4)
Exempts	24,3 (23,7)	15,6 (15)	2,9 (2,7)	24,2 (23,9)	12,8 (12,1)	39,9 (38,7)
White-collar	26,0 (27,1)	12,1 (11,8)	4,4 (3,6)	19,4 (21,2)	14,3 (14,1)	38,1 (38,9)
Total	**58,9 (59,6)**	**41,1 (40,4)**	**11,5 (10,6)**	**54,4 (56,5)**	**34,1 (32,9)**	**100,0 (100,0)**

Calculations are based on employee headcount at Dec 31.

Collective bargaining agreements for Finnish employees

Orion adheres to current employment legislation and the applicable collective bargaining agreements valid in the country of operation. Collective bargaining agreements cover both blue collar and white collar employees in our Finnish locations. A protocol between the chemical industry federation of Finland and the federation of professional and managerial staff (YTN) concerning senior salaried employees in the chemical industry is applied to our exempts.

Recruiting people

Orion provides opportunities for a wide range of professionals with variable educational and professional backgrounds. We want to be an attractive employer to talented professionals.

Our recruitment aims to find competent and motivated employees to support our current and future objectives. Recruitment also offers us opportunities to develop the competences within our organisation. Internal mobility via job rotation is promoted. Job rotation is seen as a means for driving change and as an opportunity for professional development within Orion.

Orion aims to be an attractive employer for future talents. We offer summer job and thesis assignment opportunities to students in various positions in our company. In addition, we offer a specific summer trainee programme for university students. The 'Phase 1' summer trainee programme provides opportunities for university students to gain hands-on experience in the fields of natural, pharmaceutical, technical or economical sciences. In 2019, we employed approximately 100 summer employees. Some students continued to work for us after their summer employment.

New employee hires and employee turnover

New employee hires

	Number of new employee hires	% of new hires	New hire rate %
By age group			
Under 30	289	52.0	9%
30–50	210	37.8	6%
Over 50	57	10.3	2%
By gender			
Female	314	56.5	9%
Male	242	43.5	7%
Total	**556**	**100.0**	**16%**

Calculations are based on employee headcount at Dec 31 2019.

Employee turnover

	Number of leavers	% of leavers	Turnover rate
By age group			
Under 30	160	41.0	5 %
30–50	148	37.9	4 %
Over 50	82	21.0	2 %
By gender			
Female	238	61.0	7 %
Male	152	39.0	4 %
Total	**390**	**100.0**	**11 %**

Calculations are based on employee headcount at Dec 31 2019.

Employee turnover includes temporary employees, such as summer employees.

Promoting personnel development and good performance

Orion promotes competence development and provides numerous training opportunities on a wide range of topics related to job-specific tasks and practices in the workplace. We offer Orionees both internal and external training opportunities. In 2019, we invested EUR 2.1 (1.7) million in personnel training activities. Our aim is for our employees to have the necessary competencies to support implementation of the Orion strategy. Managers are responsible for ensuring that everyone in their organisation is familiar with Orion's strategic targets, the department-level objectives well as their personal objectives. Managers also play a key role in the competence development of the organisation and

the employees, which is why we continue to invest in developing the skills of our managers.

Group-level competence requirements derived from the strategy are determined annually by our senior managers. The corresponding requirements of operational units and functions are determined by their management teams, and the requirements for departments and individual tasks are determined by departments and in the Succeeding Together! discussions. During these discussions, the level of required competences is also assessed and the development needs defined.

Our leadership principles outline the Orion way of leading people and how to act as a member of working community. Leader as a Coach, Skills of Working Together and Personal Leadership, Customer-Focused Leadership, and Leadership in Collaborative Partnership are the four most important themes. We offer a Group-level training programme called 'As a leader in Orion' for developing management and leadership skills. Management training is mandatory for all managers in all countries. This is how our management culture, policies and principles are equally implemented in all locations throughout Orion.

For developing competences and ways of working, we offer a training programme called 'As a specialist in Orion' for employees working in specialists positions. The programme includes topics such as business understanding, communication and collaboration.

We also promote Orion-tailored training programmes for competence development in strategic topics such as leadership, business understanding and partnership management. These training sessions are offered to managers, specialists and middle and top management. Some training sessions are compulsory, such as several Good Manufacturing Practices and environment, health and safety courses.

Employees' professional skills play a vital role in maintaining the quality and safety of Orion's products, as is the regulatory compliance of the manufacturing process. The regulatory requirement provides that all the employees whose performance directly or indirectly affects the quality or the safety of a medicine shall receive regular Good Manufacturing Practices training and that conclusively traceable documentation is available on their competence, training history and familiarisation with the guidance concerning required operational practices. Our training data system helps us manage the competence requirements of individual tasks in our supply chain and quality operations as well as information on the employees' qualifications and training history, with precise documentation.

All our new employees receive a comprehensive induction to their job. In addition to position-specific inductions, Orion has an eOnboarding programme to support the introduction to the company and, for example, to our strategy, operational practices and business environment.

In 2019, we applied 360- and 180-degree evaluations in Orion across the board as tools for developing competences. In the 360-degree evaluation, managers received personal feedback from their subordinates, colleagues and their own manager. In addition, representatives of our external partners could be asked to give feedback with the purpose of supporting the development of strategic partner collaboration. Employees in expert positions received 180-degree feedback from their managers and colleagues. Team leaders with no formal managerial position were also evaluated through a questionnaire.

The purpose of our talent management process is to promote every employee's career opportunities and development possibilities and to ensure that we have enough people with the ability to renew and change. Personal wishes for career and development shall be discussed with the manager in the Succeeding Together! discussion.

We are conducting performance reviews annually and the entire workforce is subject to them. The Succeed Together! discussion is a tool to discuss how the Group targets are linked to the individual employee's position. As a part of those discussions, we are setting personal targets and overviewing performance during the review period. Also, we are assessing needed actions to develop competencies and support well-being at work.

Employee surveys for further development

With the help of regular Group-wide employee surveys, we identify our strengths and the need for development in terms of the implementation of our strategy. The survey is an important tool for Orion for the development of working communities and for the collaboration between employees and management. Measures of improvement are agreed based on the survey results and implemented. The high response rates show that our employees also consider the survey important. Our employee survey was last conducted in spring 2017 and the response rate across the entire Group was 85%.

Orion will launch a renewed personnel survey in 2020. Pulse survey is an employee satisfaction survey aiming at measuring and developing employee experience and corporate culture. Survey will be conducted three times in a year.

In addition to the employee surveys, we occasionally conduct more limited enquiries, surveys and mappings of topics when it is important to learn more or hear employee opinions. This is a good way to include them in decision-making.

Health, safety and well-being at work

We want to ensure that each and every Orionee gets to go home after the working day safe and healthy. By managing the health risks at Orion, we ensure that each employee is fit for work and not exposed to occupational diseases. We want to provide our employees with a healthy and safe working environment and a fully functioning working community, supported by an inspiring working atmosphere and good management.

We are committed to improving our performance. Our long-term target is zero accidents. In addition, we have set two Group-level key performance indicators related to occupational health, safety and well-being: lost time incident frequency of own employees (LTIF 1[1]) target was 3.5 for 2019. Also, we target to decrease absences due to illness[2]. Our strategic objective, lost time incident frequency rate (LTIF 1), rose from 5.5. to 6.3 compared to the previous year. In addition, the total absence due to injuries increased to mainly due to a couple of severe workplace and commuting accidents. We took steps in 2019 to focus on improving our company safety culture, but further work is needed to achieve the long- and short-term targets. The absentee rate due to illness was 3.3% (3.1%).

Most of the workplace injuries occur in production departments, typically due to tripping and slipping, and different kind of wounds. We have implemented a new last-minute risk assessment before starting your work to identify risks and dangers of our work. We continued with safety walks and these have been done regularly from production to offices, but emphasizing safety talks in year 2019.

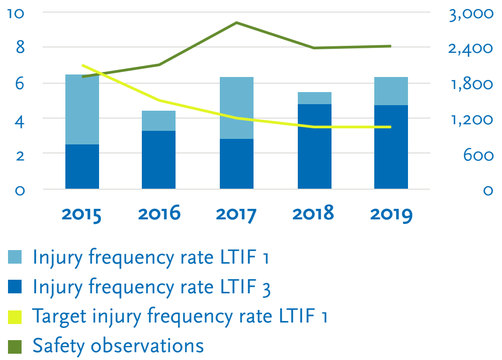
Our employees reported a total of 25 commuting injuries, i.e. injuries that occurred on their way between their home and the workplace. Common events were sprains caused by slipping when walking, and falling off bicycles. To reduce the number of commuting injuries, we have widened the scope of the injury investigation process to also include commuting injuries. Corrective action is carried out based on the root causes of the injuries found in the investigation.

Our system for recording safety observations collected as many as 2,419 (2,388) observations of different kinds of dangerous spots at our sites. Reporting is made easy: the observations can be easily recorded into the database via our intranet and can be made accessible to those responsible for carrying out corrective action. With the help of the system, employees can also follow the progress

[1] Indicates the workplace injury rate as injuries causing an absence of at least one day per million total actual working hours

[2] Absences due to illness as percentage of total theoretical working hours for own personnel..

Injury frequency rate and safety observations

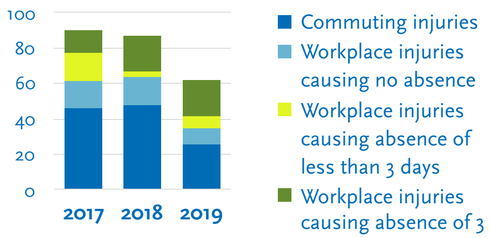


Injury frequency rate, LTIF measures the number of workplace injuries per million working hours.

LTIF 1 includes workplace injuries, which led to an absence of 1 or more days.

LTIF 3 includes workplace injuries, which led to an absence of 3 or more days.

Injuries, pcs



Workplace injuries include injuries caused by accidents that occur during working time and which require medical treatment from the doctor or sick leave.

Commuting injuries include injuries caused by accidents that occur when employees are travelling between home and work. The reported commuting injuries in 2018 contain also accidents that did not require medical treatment from a doctor.

of the action. The increase in the number of safety observations is mainly due to encouragement towards reporting and our new system, which has been taken widely in use in Orion Group in year 2019. We continue to encourage our employess and external partners to report safety observations to improve the safety at our sites.

Our occupational safety and well-being activities focus on the prevention of hazardous situations and occupational diseases and injuries. Well-being actions at work also aim to promote and support the working and functioning capacities of each Orionee. We monitor our progress towards our health and well-being objectives with the help of a variety of other indicators, such as responses from employee health surveys. Particular attention is paid to absences due to musculoskeletal problems.

In accordance with our EHS Policy, our occupational health and safety activities are managed with the guiding principle of continuous improvement. The practices applied in the management and development of occupational health and safety are determined in the Group's EHS management system, built upon the principles set out in the ISO standards. In the EHS management system, procedures are determined for predicting, preventing and identifying nonconformities and exceptional situations potentially hazardous to the environment, occupational health or safety, and corrective actions to be taken.

Improving safety culture

We continuously work to improve Orion's safety culture and our goal is to bring Orion's incident frequency to zero. To reach that goal, we must change the way we think so that intervening in our colleagues' unsafe practices becomes a norm. Intervening shows that you care for the safety of others, and has a clear connection to incident frequency. The least incidents occur in those work communities where everyone is responsible for ensuring a safe work environment for themselves and others.

As a part of the project for improving Orion's safety culture, we are implementing a Skills to care method throughout the company. Skills to care training is mandatory for all Orion managers in Finland. The implementation of Skills to care is the key for changing the safety mindset and enabling continuous improvement in health and safety issues. When we think before we act and take care of our colleagues, achieving this goal of zero accidents is possible. In 2019, we continued Skills to care training sessions, focusing on Orionees from production, technical operations and quality control operations. Approximately 170 managers were trained. After completing the training, they were asked to, in turn, give the Skills to care training to their teams. Every participant signed a commitment to receive and to give positive and constructive feedback. Based on the feedback, the participants considered training sessions useful and practice-oriented.

In addition to the right attitude, we also need good proactive practices and tools. A last-minute risk assessment checklist tool combined with the acronym 'STOP!' was introduced in 2019. 'STOP!' is easy to remember: the first letter 'S' stands for the idea that everyone should take a short thinking break and plan one's work task in advance. 'STOP!' points out that an employee should be aware of EHS risks related to the work task at hand and should have adequate skills, knowledge and equipment to perform the task and courage to ask for further instructions, if the employee is uncertain how to perform the task safely.

We continued the safety walks with safety talks across the company. Regular safety rounds are used for creating dialogue among our managers and employees about safety matters related to their jobs and the workplace. We also encouraged our employees to report safety observations and corrective actions taken via our online EHS platform. The safety observations help us prevent potential accidents and we can follow the progress of corrective actions via the online platform.

Systematic assessments of the risks related to the workplace, processes, working conditions and methods were carried out by the occupational health and work safety organisation in order to continue developing safe working conditions. By developing our own practices and models, we continue to improve our risk management processes. We continued comprehensive risk assessments in 2019. We implemented a risk assessment module on our online EHS platform to support the documentation of risk assessments and monitoring the fulfilment of corrective actions. This was considered an efficient tool.

The operating models for 'Early support', 'Treatment practices for the occupational healthcare for musculoskeletal and mental disorders' as well as for the management of ageing employees are examples of the ways in which we promote well-being at work and better manage the risks of disability. 'Managing difficult situations' is our operating model for facilitating and accelerating the analysis and resolution of conflict situations in the working community, as well as for following up the solution.

Our employees are given health check-ups, depending on their age group, to evaluate their fitness for work and to determine any need to enhance it. Preventive occupational health activities include guidance, consultation and support, both to individual employees and working communities, to maintain their ability to work and function and to manage everyday life, as well as workplace surveys relating to health and safety.

We encourage and support our employees to take care of their personal well-being. Employees can take part in numerous recreational activities supported by the company. Sponsored culture vouchers can be used for sports and cultural activities in Finland.

Environmental, health and safety guidance and training

Training sessions are a part of our safety culture and play an important role in the prevention of accidents. We organise regular online safety training programmes and short online safety sessions.

In 2019, Orion organised 325 (254) training courses, focusing on environment, health and safety, with a total of 4,533 (3,107) attendants. In addition, Orion has numerous EHS e-learning courses, which were taken approximately 5,700 times during 2019.

The general guidelines and principles concerning corporate safety and safe working are provided in our Corporate Governance Manual and Orion Security Guide as well as in more detailed functional and location-specific guidelines. Task-specific aspects of safety are observed in the standard operating procedures defined in detail for individual tasks and work phases. All EHS guidelines are maintained in our internal information platform, which are accessible to all our employees.

We emphasise the importance of each employee being aware of the health and safety risks that are involved in their duties, as well as how to avoid them. All employees are required to follow the safety instructions and act without posing a risk to their own safety or others'. We arrange regular training courses as part of our good safety and security practices to avoid and prevent hazardous events.

MANAGEMENT OF HUMAN RESOURCES AND OCCUPATIONAL HEALTH AND SAFETY

MANAGEMENT APPROACH	Aiming for the highest health and safety standards in the industry. Great place to work, a responsible employer committed to building well-being and enthusiasm together in the workplace.
POLICIES AND COMMITMENTS	Orion's EHS policy, HR Policy, CoC. Responsible Care sustainability programme by the Chemical Industry Federation of Finland.
GOALS AND TARGETS	• Long-term target: zero accidents. • Short-term target: LTIF 1[1] 3.5 by 2019. • Goal: decrease absences due to illness.
RESPONSIBILITIES AND RESOURCES	EHS affairs and services managed and coordinated as follows: • Executive Management Board: responsible for EHS operating principles being followed at Group level. • EHS steering committee (headed by the Director for EHS and Facility Management): approves action plans and conducts management reviews for Orion Corp. • Fermion safety committee (headed by the EHS Manager of Fermion): approves and follows up action plans for Fermion Oy. • EHS virtual team: Group-wide forum of EHS-professionals. Team members responsible for operational work safety activities. • Operational managers: responsible for operations in each location carried out by the EHS Management System and regulatory and legal requirements. HR affairs and services managed and coordinated by the HR Department: • The Vice President, HR. • Occupational Health Services part of the HR services.
GRIEVANCE MECHANISMS	Online EHS information system for filing reports on environmental issues (available for all employees, enables anonymous reporting).
EVALUATION OF MANAGEMENT APPROACH	Systematic audits and management reviews of our own operations.

[1] LTIF 1: Indicates the workplace injury rate as injuries causing an absence of at least one day per million total actual working

Business ethics and transparency

Business ethics and transparency

Doing business in a responsible manner means that we are a good corporate citizen with high ethical standards, solid corporate governance and strong financial performance. We also expect high ethical standards from our partners. We communicate transparently and in a timely manner to our stakeholders.

Code of Conduct principles for everything we do

Orion's Code of Conduct sets out the operating principles of our company. We believe responsibility is everybody's business and the Code of Conduct guides our daily work. We also expect our partners to act in a responsible and ethical manner.

In 2019, we revised and updated our Code of Conduct to meet today's requirements. The Code of Conduct is structured according to three themes: compliance with laws and regulations, integrity and responsibility. In particular, matters related to environmental management, human rights and data protection were updated. When updating the Code of Conduct, we wanted to highlight that the Code of Conduct is understandable and relatable for all readers. The updated Code of Conduct now includes "What if?" guidelines to give practical guidance for everyday situations that Orionees or our partners may face. The Code of Conduct is available in 14 languages. Read more about our operating principles from the **Code of Conduct**.

We encourage Orionees to familiarize themselves with the Code of Conduct through e-learning. E-learning will be compulsory for all Orionees and it will be launched in 2020. We will monitor the Code of Conduct e-learning completion rate and report the performance as a part of our sustainability reporting.

Ensuring human rights throughout the value chain

At Orion we respect internationally recognised human rights in all of our activities and promote them in practice. We are committed to the principles of the Universal Declaration of Human Rights and the core conventions of the International Labour Organization (ILO) and expect the same from our business partners. We do not accept or encourage activities violating human rights or participate in any such activities.

Mutual trust, respect and diversity are at the core of our values. We do not accept discrimination in any form. We do not tolerate the use of child labour or forced labour in any of our operations, nor in any such operations of our suppliers or partners.

Human rights are integrated to our corporate governance practices and our supplier management due diligence processes. The human rights management processes of our partners are described in the Sustainable global supply chain management section of this report. To ensure full compliance throughout the value chain, we will review our human rights due diligence processes in 2020.

We report our practices on respecting human rights and prevention of corruption and bribery as part of the non-financial reporting in our Financial Statement documents.

We respect the freedom of association of our employees and their right to form trade unions. According to the Group's general principle of legal compliance, Orion follows the legislation and binding collective agreements. This is also recorded in our Human Resources Policy, which is part of the Group's Corporate Governance Manual.

Sustainable global supply chain management

Orion has a vast network of suppliers in over 50 countries. Our supplier base supplies us with packaging materials, raw materials (e.g. active pharmaceutical ingredients) and products. In addition, we rely on outside partners for the supply of services and materials to support our core businesses (referred to as indirect procurement). Orion's own activities cover only part of the value chain of our products and we recognise the importance of ensuring and developing sustainable supply chain management. This is essential as many of our sustainability risks are related to our global supply chain and as most potential for reducing our product's environmental impact lies in manufacturing stage.

Sustainability requirements for our external partners

As a pharmaceutical company, we expect rigorous quality and product safety requirements from our suppliers. Read more about the product quality requirements from the **Patient safety and ensuring reliable supply of medications** section of this report.

We expect our suppliers, distributors and other partners to commit to Orion's Third Party Code of Conduct, which defines our minimum sustainability related requirements. In addition to regulatory requirements, it includes the key principles for business operations concerning sustainability and ethics. By the end of 2019, 79% of our active packaging material, raw material and product suppliers had signed the Third Party Code of Conduct.

In addition, Orion expects its product and raw material suppliers to acknowledge and adhere to the Supplier Sustainability Requirements. These constitute a minimum set of requirements that we expect from these suppliers and which we must enforce as per our Third Party Code of Conduct and additional requirements for management systems, safe working practices, environmental, health and safety protection.

By the end of 2019, 86 sustainability assessments were completed and 93 sustainability assessments were ongoing. Assessments were done either as questionnaires or on-site audits. All assessments followed a pharmaceutical industry template compiled by the Pharmaceutical Supply Chain Initiative (PSCI).

In 2019, we further improved our sustainable procurement processes, implemented new ways of working and evaluated risks within the area of product, raw material and packaging material procurement. We trained 98 procurement professionals internally on sustainability and made further progress in making sustainability part of the day-to-day work of procurement. We also offered sustainability training to our suppliers in selected regions through the supplier training sessions of the PCSI. Altogether, a total of 40 suppliers were trained.

In 2020, our aim is to harmonise our supplier risk assessment process to involve all procurement areas, including indirect procurement.

A risk-based approach to manage supplier sustainability

We have a risk-based approach for managing our global supply chain. Orion's suppliers in all supplier categories are assessed based on their industry, location and business criticality. Risk mitigation tools used are either self-assessesments or on-site audits. All high-risk suppliers undergo an on-site sustainability audit. When applicaple, we use a pharmaceutical industry standard sustainability audit template compiled by the PSCI. All observations are followed up through a 'Corrective Action Preventive Action' plan. We conduct risk-based audits on our tier 1 suppliers, but also tier 2 suppliers, if applicable based on the risk assessment. So far, self-assessments and on-site audits have mainly been done for tier 1 suppliers of packaging materials, raw materials and products.

Industry collaboration

At Orion, we continuously aim to reduce our environmental burden and manage the social risks in our supply chain. In addition to our own efforts, we see that a common vision and shared responsibility is an effective way to improve and develop best practices in sustainable supply chain management. Orion is a member of the Pharmaceutical Supply Chain Initiative (PSCI), an industry initiative focusing on promoting and continuously improving the pharmaceutical supply chain in the areas of labour, ethics, environment, health and safety, and responsible procurement practices. We actively participate in PSCI committees, share information within the network and utilize the sustainable supply chain management tools that PSCI offers.

Open and transparent communication

As a pharmaceutical company, our communication is to be reliable, transparent, comprehensive and timely. Orion has, for over 10 years, reported on its sustainability performance. Since 2017, non-financial reporting on sustainability topics has been included in the Financial Statements documents.

We are promoting the company's interests, such as by taking part in public dialogue and influencing decision-makers. We influence political decision-making mainly via relevant industry associations. All promotion of interest is done in accordance with Orion's general business policy and EU and national regulations. We do not support political activities.

Ethical marketing and communications

Orion's sales and marketing organisations for pharmaceuticals primarily follow the locally valid legislation concerning medicinal products, marketing, consumers and competition, the International Code on Advertising and Marketing Communication Practice as well as the Orion Group's Code of Conduct and internal guidelines, which adhere to the principles to the EFPIA Codes of Practice. The management responsibilities in our pharmaceutical sales and marketing operations have been arranged to meet the requirements of the relevant legislations in their respective countries and Orion's relevant standard operational procedures and internal codes.

When preparing marketing communications and materials, we follow the procedures determined by healthcare authorities for checking and confirming the legal, regulatory and ethical compliance of the content before the material is released for use and publication.

We organise training for our sales and marketing organisation on the industry codes and practices and Orion's practices and principles on a regular basis.

Healthcare professionals as collaboration partners

Doctors and other healthcare professionals, as well as the organisations they work for, are important collaboration partners for the pharmaceutical industry. They provide valuable clinical expert knowledge for the development and improvement of medicinal treatments. Healthcare professionals can in turn benefit for further education and exchange of information offered by the pharmaceutical industry in different forums.

We are a part of the healthcare system and provide training to 13,500 healthcare professionals annually in Finland. These include doctors, pharmacists, medical students and nurses.

In order to increase the transparency of the different forms of interaction and the related financial compensation, Orion has chosen to publicly disclose the details of its compensation to the healthcare professionals with the right to prescribe and deliver medicines. We have reported this data stating transfers of value on an individual basis for each identifiable recipient annually since 2016. We believe that being transparent and publishing the compensation paid to healthcare professionals and healthcare organisations for the time spent working with us builds an understanding of this collaboration and helps foster trust with stakeholders. We disclose

all the payments made to healthcare professionals based on the work done for all the countries in which we have our own operations. We do not make any payments to healthcare professionals for promotional purposes. Disclosure reports are available on our public web pages and are accessible for each country. Individual healthcare professionals can however prevent their names from being disclosed in the report based on their legal right to privacy.

The information we share with doctors, pharmacies and patients regarding medicinal products is in accordance with the product characteristics confirmed by regulatory medicinal authorities on the basis of the results of the research and the data collected in clinical use.

Transparent collaboration with patient organisations

We support patient organisations in their socially important role in providing information, arranging rehabilitation and supporting patients and their families. We also welcome patient interest in contributing to the clinical development of new medicinal products.

EUPATI (European Patients' Academy) is a pan-European project which aims to provide education and training in order to increase the capacity and capability of patients to understand and contribute to medicines research and development, and also to improve the availability of objective, reliable, patient-friendly information for the public. In Finland, EUPATI activities are coordinated by the Association of Cancer Patients in Finland. We have supported the EUPATI Finland project since the project started.

In collaboration we are committed to the commonly agreed codes of practice on the relationships between pharmaceutical companies and patient organisations operating in Europe. The codes ensure ethical and transparent collaboration with patient organisations. They emphasise the patient organisations' integrity and the independence of pharmaceutical companies. Direct and indirect support to patient organisations must be transparently disclosed and provided, without any terms restricting competition or the supported organisation's freedom of activity.

In 2019, the total monetary value of our collaboration with patient organisations came to EUR 64,932 (78,739). More detailed information about our collaboration with patient organisations is reported on an annual basis on our corporate website. The reports provide details of each collaboration, and they comprise all the countries in which we have our own marketing organisation for pharmaceuticals.

Principles concerning donations

Most of the annual donations made by the Orion Group for purposes of public interest are based on the decision by the Annual General Meeting to donate part of the distributable funds of Orion to medical research and other purposes of public interest. The Board of Directors decides on the allocation of the donations. Donations for purposes of public interest are granted in accordance to our Donations Policy.

Donations for purposes of public interest, EUR[1]

	2017	2018	2019
Donations	300,000	250,000	250,000

[1] Most of the annual donations made by the Orion Group for purposes of public interest are based on the decision by the Annual General Meeting (AGM). Therefore the reporting period is from AGM to AGM and not a calendar year.

At the Group level, the prioritised charitable organisation receiving financial support from us is the John Nurminen Foundation, which works to save the Baltic Sea and its heritage for future generations. As a corporate partner and sponsor of the John Nurminen Foundation, we are a partner in the Clean Baltic Sea projects. Contributing to Clean Baltic Sea aligns well with our own efforts and the actions we have carried out, while systematically developing our own wastewater management. Together, and via the John Nurminen Foundation's network of specialists that expertise can also be shared and enhanced with others for the good cause.

Personnel training on business ethics

Orion's practices related to community relations, social and political influencing, competitive legislation and anti-corruption are included in the induction of new employees as well as to manager and specialist trainings.

The principles concerning anti-corruption are included in our Code of Conduct and in our Anti-Corruption Policy, which unambiguously instruct our employees to refuse to offer or take a bribe or any comparable benefit. Our employees are regularly and systematically educated and trained to internalise the purpose and importance of these principles. Anti-corruption and anti-bribery training is mandatory for all white-collar employees. The latest large-scale training of employees in scope was arranged in 2017, when the total number of employees attending was 2,808. We ensure that the training is completed by all new white-collar employees. In 2019, 443 new Orionees completed the training.

Identifying and assessing risks relating to corruption is part of our comprehensive overall Group risk management. Assessing bribery risks is also a standard part of preparing for all collaboration agreements, among other things.

In addition to the principle of legal and ethical compliance and anti-corruption specified in our Corporate Governance Manual and Code of Conduct, we have also defined specific guidelines concerning competition law, to which every employee is expected to adhere. We arrange training related to competitive

legislation and agreements for all the relevant employees.

To ensure awareness of our values and policies, we provide training to our employees. Our policies are available on our corporate website for all partners and suppliers. Human rights matters are included to mandatory supervisor training, which focuses on, among other things, our Human Resources Policy. As part of the Human Resources Policy, employee rights are also regularly discussed in company-wide human resources information sessions.

Reporting of ethical concerns

For the reporting of any misconduct, Orion has a public whistleblowing channel in place. The channel promotes good governance and ethical operations, and gives us a chance to improve processes after reported incidents. We encourage employees and other stakeholders to report any concerns or any suspected misconduct of our company's policies in good faith. We take such reports seriously, investigate and take appropriate, case-specific measures to stop any behaviour and activity which violate our policies. Non-compliance with our policies may lead to a dismissal from employment or the termination of our relationship with third parties.

In 2019, there were no material fines or non-monetary sanctions for non-compliance with laws and regulations related to anti-corruption, human rights violations in own operations, health or safety impacts of our products, provision and use of our products, environment or anti-competitive behaviour.

Orion has a privacy framework in place and we continuously develop our practices regarding data protection. Orion offers a GDPR e-learning to employees. E-learning is compulsory to all employees handling personal data. In 2019, there were no significant breach of customer privacy or losses of customer or research data.

Coverage of Orion's pension obligations

Orion has pension plans in accordance with each country's local regulations and practices. In the defined contribution plans, we pay fixed contributions to separate entities such as pension insurance companies in Finland who manage the pensions. We have no legal or constructive obligations to pay further contributions if the recipient of the contribution is unable to pay the employee benefits. Our most important defined benefit pension plans are in Finland, where statutory insurance under the Employees' Pensions Act (TyEL) has been arranged through the Orion Pension Fund for the Group's clerical employees and supplementary pension security for some of the clerical employees.

Our pension obligations are listed under Note 12 "Pension assets and pension liabilities" of the Financial Statements 2019. At the end of 2019, our pension obligations totalled EUR 324.9 (299.7) million. We had a pension net asset of EUR 55.8 (asset of 31.5) million from the Pension Fund and a net liability of EUR 3.4 (liability of 3.6) million to other units.

Our aim is to grow faster than the market

We produce added value to our stakeholders and the society. Our aim is to ensure the economic sustainability of our operations over the coming years. Our objectives for profit development and financial position have been set to ensure economic stability, to create a solid foundation for long-term profitable growth, and to enable operations and profitability even in economically challenging times.

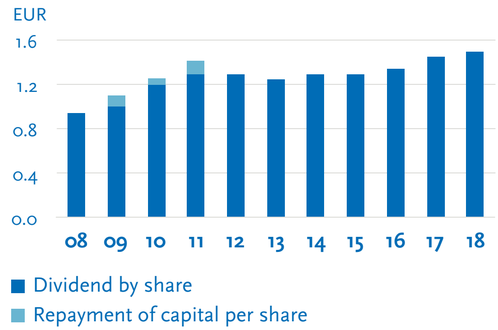
Through the financial objectives, we aim to develop the Group's shareholder value and ensure financial stability and profitable growth. Our financial objectives are:

- Growing net sales more rapidly than growth of the pharmaceuticals market. Achievement of this objective requires continuous investment in development of the product portfolio.
- Maintaining profitability at a good level. The aim is operating profit that exceeds 25% of net sales.
- Keeping the equity ratio at least 50%.
- Distributing an annual dividend that in the next few years will be at least EUR 1.30 per share, and increasing the dividend in the long term.

In the short term what actually happens may deviate from the objectives.

According to our dividend policy, we take into account the distributable funds, the capital expenditure and other financial requirements in

Orion share dividend per share, 2008–2018



the medium and long term to achieve the financial objectives. In the challenging economic situation and the changes that have taken place in our business environment over the recent years, we have been able to grow in most years, operate profitably and pay good dividends to our shareholders.

Creating wealth via taxes and employment

We are committed to paying all taxes that are legally due and meeting all disclosure requirements in the countries where we operate. We have paid the taxes due on the good and stable financial result regularly and on time. In 2019, Orion's taxes and withholding taxes amounted to EUR 116 (114) million. We have also always taken care of our pension commitments in full.

Our largest direct economic impacts come from the employment opportunities we provide. Orion employs some 3,200 employees globally. Some 80% of Orionees are located in Finland.

Reliable communications for Orion shareholders

Our shareholder base is diverse with 66,595 registered shareholders at the end of 2019. The largest shareholder group consists of private Finnish households, and at the end of 2019 they held about 40% of the total shares and 60% of the total votes.

As a public listed company, we fulfil our disclosure obligations diligently. We also actively develop our corporate communications and aim to utilise different communication channels and tools in a versatile, yet purposeful manner. Our focus is on the good quality of the contents of our financial statements and our website to provide capital markets and shareholders with up-to-date information about the Group's operations and performance. We also organise regular meetings with investors globally.

External funding received

Significant financial assistance received from government, EUR million

	2017	2018	2019
Business Finland grants	1.1	1.5	1.4

Orion has received funding for its development projects from Business Finland, which grants funding to Finnish companies and institutions to promote research, development and innovation as well as to share any related risks. Some Business Finland-funded projects are not public. The figures reported above are based on the Business Finland annual reviews, and they contain both direct cash funding and project-specific loans.

MANAGEMENT OF BUSINESS ETHICS AND TRANSPARENCY

MANAGEMENT APPROACH	Committed to promoting high ethical standards by always striving to be better. Expecting the same standards from our partners. Transparency to maintain and build trust.
POLICIES AND COMMITMENTS	Committed to respecting internationally recognised human rights, the principles of the Universal Declaration of Human Rights and the core conventions of the ILO. Expecting the same from our business partners. CoC, Anti-Corruption Policy, Corporate Governance Manual, Third Party CoC, Supplier Sustainability Requirements.
GOALS AND TARGETS	• All white collar employees regularly trained on anti-corruption and bribery matters. All new employees trained. • 100% of active packaging material, raw material and product suppliers to sign Third Party CoC.
RESPONSIBILITIES AND RESOURCES	• Executive Management Board (EMB): reviews and approves the CoC and other policies and operating principles. • The CFO: member of the Group's EMB. Heads financial affairs, incl. financial reporting. • The Legal Affairs function: monitors current legislation, proposes changes and incorporates them into practice. Responsible for providing advice and training on the CoC and other related matters. • The Corporate Responsibility function: Group-level sustainability expert, responsible for driving sustainability initiatives, supporting processes and practices and coordinating reporting. Developing human rights due diligence processes. • The Global Medical Affairs function: coordinates marketing communication. Confirms its compliance with national and transnational regulations. • The Group's Procurement and Quality Assurance organisations: responsible for following up and monitoring suppliers' ability to meet our requirements.
GRIEVANCE MECHANISMS	Process for reporting misconduct. All reports investigated and if appropriate, case-specific measures to stop behaviour and activity violating our policies
EVALUATION OF MANAGEMENT APPROACH	Monitoring compliance with legal and regulatory matters, internal guidelines and human rights principles, according to our corporate governance practices. Supply chain risks managed and monitored through due diligence practices.

Reporting principles and key figures

Reporting principles and key figures

Orion has reported on its sustainability performance since 2009. Sustainability data is published annually. In addition, non-financial information has been included in Orion's Financial Statements documents since 2017. A materiality analysis conducted in 2018 is the basis for defining reporting scope and indicators.

The 2019 Sustainability Report refers to the Global Reporting Initiative (GRI) Standards 2016. We have identified and chosen the most relevant indicators for us, largely relying on the GRI framework. Supporting the material issues, we have also established some Orion-specific indicators that reflect our practices and processes to ensure the quality of our products and their safety for patients.

The materiality, principles and boundaries used in this report, as well as the key stakeholder groups have been confirmed by Orion's Executive Management Board, which also approves this report for publication.

The scope of our reporting

Our sustainability report principally covers group-wide operations. The data represents all of our operational locations and is reported according to the group structure.

Environmental management data only includes Finnish sites, as all of our manufacturing units are located within Finland and so the majority of the environmental impact of our operations occurs there. The operational units outside of Finland are primarily marketing or liaison offices that market our pharmaceutical products and operate in leased offices.

Occupational health and safety data includes only Finnish sites. Approximately 80% of our employees are located within Finland, where our production units are also located. We collect occupational health and safety data also from our operational units outside of Finland, but don't report the data as part of our sustainability reporting.

Personnel data covers the entire Orion Group.

Reporting covers the full reporting year 2019, unless otherwise specified. 2018 figures are shown in brackets for selected indicators.

The following organisational groupings are used in data collection and reporting:

ORION GROUP

Orion Corporation
Pharmaceutical operations and Head Office functions in Espoo
Pharmaceutical operations in Turku
Pharmaceutical operations in Kuopio
Pharmaceutical operations in Salo
Foreign Orion Pharma marketing subsidiaries and FinOrion Pharma India Pvt. Ltd.

Fermion Oy
API manufacturing in Hanko
API manufacturing in Oulu
API R&D unit in Espoo

Orion Diagnostica segment is reported as a discontinued operation. The comparison figures for 2017 include the Orion Diagnostica segment, which affects the comparability of the data reported for the preceding years.

GRI content index

SR = Sustainability Report 2019
CG = Corporate Governance Statement 2019
FS = Financial Statements documents 2019

GRI STANDARD	CONTENT INDICATOR	LOCATION	COMMENTS
GRI 102: GENERAL DISCLOSURES 2016			
ORGANIZATIONAL PROFILE			
102-1	Name of the organization	See comments	Orion Oyj
102-2	Activities, brands, products, and services	SR 4–5	
102-3	Location of headquarters	See comments	Orionintie 1 A FI-02200 Espoo, Finland
102-4	Location of operations	SR 5	
102-5	Ownership and legal form	See comments	Orion Oyj is a public company and its shares are listed on the Nasdaq Helsinki.
102-6	Markets served	SR 5	
102-7	Scale of the organization	SR 4–5	
102-8	Information on employees and other workers	SR 38	
102-9	Supply chain	SR 46–47	
102-10	Significant changes to the organization and its supply chain	See comments	No significant changes in 2019.
102-11	Precautionary Principle or approach	CG 17–24	
102-12	External initiatives	SR 11	
102-13	Membership of associations	SR 11	
STRATEGY			
102-14	Statement from senior decision-maker	SR 6	
102-15	Key impacts, risks, and opportunities	FS 18–22	
ETHICS AND INTEGRITY			
102-16	Values, principles, standards, and norms of behavior	SR 12	
102-17	Mechanisms for advice and concerns about ethics	SR 49	
GOVERNANCE			
102-18	Governance structure	SR 16	

GRI STANDARD	CONTENT INDICATOR	LOCATION	COMMENTS
STAKEHOLDER ENGAGEMENT			
102-40	List of stakeholder groups	SR 18	
102-41	Collective bargaining agreements	SR 40	We do not collect data outside of Finland. Bargaining agreements are handled according to local legislation and customs in all operating countries.
102-42	Identifying and selecting stakeholders	SR 18	
102-43	Approach to stakeholder engagement	SR 18	
102-44	Key topics and concerns raised	SR 18	
REPORTING PRACTICE			
102-45	Entities included in the consolidated financial statements	FS 82	
102-46	Defining report content and topic Boundaries	SR 52	
102-47	List of material topics	SR 10	
102-48	Restatements of information	See comments	No restatements.
102-49	Changes in reporting	See comments	No significant changes.
102-50	Reporting period	See comments	January 1, 2019 - December 31 2019
102-51	Date of most recent report	See comments	Orion's Sustainability Report 2018 was published on April 29, 2019.
102-52	Reporting cycle	See comments	Annual
102-53	Contact point for questions regarding the report	See comments	Orion Corporation Orionintie 1A, P.O. Box 65 FI-0210 Espoo, Finland Phone: +358 10 4261 www.orion.fi/en
102-54	Claims of reporting in accordance with the GRI Standards	SR 52	

GRI STANDARD	CONTENT INDICATOR	LOCATION	COMMENTS
102-55	GRI content index	SR 53–55	
102-56	External assurance	See comments	Report has not been externally assured by third party.
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the materials topic and its Boundary	SR 9–10, FS 18–22	
103-2	The management approach and its components	SR 16, 25, 36, 44, 50	
103-3	Evaluation of the management approach	SR 25, 36, 44, 50	
SPECIFIC STANDARD DISCLOSURES			
GRI 200: ECONOMIC			
ECONOMIC PERFORMANCE			
201-3	Defined benefit plan obligations and other retirement plans	SR 49	
201-4	Financial assistance received from government	SR 50	
GRI 300: ENVIRONMENTAL			
MATERIALS			
301-3	Materials used by weight or volume	SR 30, 57	
301-2	Recycled input materials	SR 30, 57	
301-3	Reclaimed products and their packaging materials	SR 23	
ENERGY			
302-1	Energy consumption within the organization	SR 57	Data covers all Finnish locations. We don't collect data from locations outside of Finland.
302-4	Reduction of energy consumption	SR 57	Data covers all Finnish locations. We don't collect data from locations outside of Finland.
WATER			
303-1 (2016)	Water withdrawal by source	SR 57	Data covers all Finnish locations. We don't collect data from locations outside of Finland.
EMISSIONS			
305-1	Direct (Scope 1) GHG emissions	SR 32, 57	Data covers all Finnish locations. We don't collect data from locations outside of Finland.
305-2	Energy indirect (Scope 2) GHG emissions	SR 32, 57	Data covers all Finnish locations. We don't collect data from locations outside of Finland.
305-5	Reduction of GHG emissions	SR 32	
EFFLUENTS AND WASTE			
306-2	Waste by type and disposal method	SR 33	
ENVIRONMENTAL COMPLIANCE			
307-1	Non-compliance with environmental laws and regulation	SR 49	
GRI 400: SOCIAL			
EMPLOYMENT			
401-1	New employee hires and employee turnover	SR 40	
OCCUPATIONAL HEALTH AND SAFETY			
403-2 (2016)	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	SR 42, 58	Information covers the Finnish operations.
TRAINING AND EDUCATION			
404-2	Programs for upgrading employee skills and transition assistance programs	SR 40–41	
DIVERSITY AND EQUAL OPPORTUNITY			
405-1	Diversity of governance bodies and employees	SR 39–40	
NON-DISCRIMINATION			
406-1	Incidents of discrimination and corrective actions taken	See comments	We have no record of any violations of the discrimination ban during the periods under review.

GRI STANDARD	CONTENT INDICATOR	LOCATION	COMMENTS
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	See comments	There are no such functions or activities in our Group in which the right to exercise freedom of association and collective bargaining is under risk.
CHILD LABOR			
408-1	Operations and suppliers at significant risk for incidents of child labor	See comments	There are no such operations within the Orion Group where the risk of using child labour is significant. We have no record of any situations where child labour has been used in relation to our own or our suppliers' operations during the periods under review.
FORCED AND COMPULSORY LABOR			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	See comments	We have no record of any situations where forced or compulsory labour has been used in relation to our own or our suppliers' operations during the periods under review.
SUPPLIER SOCIAL ASSESSMENT			
414-1	New suppliers that were screened using social criteria	SR 46–47	Partially reported
CUSTOMER HEALTH AND SAFETY			
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	SR 23, 49	Partially reported
MARKETING AND LABELING			
417-1	Requirements for product and service information and labelling	SR 20–25	Partially reported

GRI STANDARD	CONTENT INDICATOR	LOCATION	COMMENTS
CUSTOMER PRIVACY			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	SR 49	
SOCIO-ECONOMIC COMPLIANCE			
419-1	Non-compliance with laws and regulations in the social and economic area	SR 49	

Key figures

PATIENT SAFETY AND ENSURING RELIABLE SUPPLY OF MEDICATIONS	2017	2018	2019
Product recalls due to product defects total, pcs	**10**	**8**	**7**
Product recalls due to product defects, medicinal product events, pcs	7	6	5
Class 1 (Critical)	0	2	0
Class 2 (Major)	1	1	2
Class 3 (Minor)	6	3	3
Product recalls due to product defects, non-medicinal, pcs	3	2	2
Number of audits of Orion's operations	**81**	**61**	**88**
Audits by authorities	19	13	29
Audits by collaboration partners	62	48	59
Critical observations	0	0	1
Number of audits undertaken by Orion	**314**	**238**	**251**
Critical observations	26	10	9
Rejection	5	1	5
Number of customer complaints about the Pharmaceutical business (ppm)[1]	**64**	**56**	**76**

[1] The number of customer complaints about the operations of the Pharmaceuticals business is reported as the number per million packages (ppm).

FINANCIAL PERFORMANCE	2017	2018	2019
Net sales, EUR million	1,084.6	977.5	1,051.0
Operating profit, EUR million	293.0	252.8	252.8
% of net sales	27.0%	25.9%	24.1%
Profit before taxes, EUR million	286.5	248.4	250.8
% of net sales	26.4%	25.4%	23.9%
Income tax expense, EUR million	60.5	51.0	50.5
R&D expenses, EUR million	105.1	104.0	119.3
% of net sales	9.7%	10.6%	11.3%
Capital expenditure, EUR million	76.5	64.8	42.6
% of net sales	7.1%	6.6%	4.0%
Assets total, EUR million	1,055.5	1,146.7	1,035.7
Equity ratio, %	64.6%	68.8%	76.7%
ROCE (before taxes), %	36.2%	44.3%	29.9%
ROE (after taxes), %	34.2%	45.5%	25.8%
Personnel expenses, EUR million	218.1	202.8	217.1
Financial assistance received from government, EUR million	1.1	1.5	1.4

ENVIRONMENTAL PERFORMANCE	2017	2018	2019
Production volumes by type of product total, tonnes	**2,952**	**3,778**	**3,706**
Tablets	1,561	1,753	1,738
Injection products	47	45	60
Gels and ointments	902	1,544	1,517
Liquid preparations	260	254	208
Active pharmaceutical ingredients, API	181	182	183
Use of materials total, tonnes:	**13,656**	**12,395**	**13,626**
Direct manufacturing materials	9,462	8,155	9,345
Packaging materials	4,194	4,241	4,281
Share of recycled materials (recycled solvents) of total materials	15%	15%	16%
Waste total, tonnes	**12,598**	**13,725**	**15,123**
Hazardous waste total, tonnes	10,006	11,182	12,633
Materials recovery: reuse, recycle, composting, recovery	104	4	37
Energy recovery	39	5	3
Incineration, mass burn[2]	9,863	11,172	12,592
Landfill	0	0	0
Other[1]	0	0	0
Non-hazardous waste total, tonnes	2,592	2,543	2,490
Materials recovery: reuse, recycle, composting, recovery	1,510	1,764	1,710
Energy recovery	1,062	745	687
Incineration, mass burn	19	30	94
Landfill	0	4	0
Other[1]	0	0	0
Share of hazardous waste	79%	81%	84%

[1] Other includes deep well injection, on-site storage and all other means

[2] Hazardous waste incineration includes waste streams that are pre-treated by evaporation before incineration

ENVIRONMENTAL PERFORMANCE	2017	2018	2019
Energy consumption total, MWh	**160,818**	**155,198**	**158,442**
Direct energy consumption total, MWh	14,801	13,593	13,453
Heavy fuel oil	0	0	0
Light fuel oil	402	1,189	470
Natural gas	14,399	12,404	12,983
Indirect energy consumption total, MWh	146,017	141,605	144,989
District heat	48,512	42,917	47,120
Steam	27,787	29,714	30,278
Electricity	69,719	68,974	67,591
Energy consumption by reporting unit, MWh:			
Orion Corporation	106,889	106,171	102,742
Fermion Oy	46,097	49,028	55,700
Orion Diagnostica Oy	7,833	NA	NA
Energy saved due to efficiency improvements, MWh	**3,725**	**1,074**	**1,422**
Electricity	-1,841	-346	144
Heat	4,992	1,420	878
Fuels	574	0	400
CO_2 emissions from energy consumption total, tonnes:	**44,589**	**39,581**	**20,123**
Scope 1, direct emissions	3,089	2,788	2,838
Scope 2, indirect emissions	41,500	36,793	17,285
Water withdrawal and consumption total, 1,000 m^3:	**266**	**256**	**268**
Orion Corporation	188	205	195
Fermion Oy	59	51	73
Orion Diagnostica Oy	19	NA	NA
Environmental expenditures and investments total, EUR 1,000:	**8,788**	**5,896**	**6,818**
Environmental investments	3,550	396	1,263
Environmental protection expenses	5,238	5,500	5,555

RESPONSIBILITY FOR ORIONEES	2017	2018	2019
Absenteeism due to illness, hours	177,635	170,697	180,208
Absentee rate due to illness	3.0%	3.1%	3.3 %
Absenteeism due to injuries, hours	1,664	2,696	6,352
Work time lost due to absenteeism, hours	179,299	173,393	186,560
Absentee rate	3.3%	3.5%	3.7%
Injury events total	**90**	**87**	**62**
Workplace injuries causing absence of 3 or more days	13	20	20
Workplace injuries causing absence of less than 3 days	16	3	7
Workplace injuries causing absence, total	29	23	27
Workplace injuries causing no absence	15	16	9
Workplace injuries total	44	39	36
Commuting injuries	46	48	26
Fatalities	0	0	0
Injury rate LTIF 1	6.3	5.5	6.3
Injury rate LTIF 3	2.8	4.8	4.7
Actual working hours	4,637,686	4,168,962	4,274,440
Theoretical working hours	5,480,055	4,960,848	5,081,023

RESPONSIBILITY FOR ORIONEES	2017	2018	2019
Personnel at the end of the period	3,464	3,154	3,265
Average personnel during the period	3,513	3,179	3,251
Number of employees by region as at 31 Dec:	**3,464**	**3,154**	**3,256**
Finland	2,802	2,485	2,594
Other Nordic countries	97	92	92
Germany	73	81	90
UK and Ireland	55	52	50
Russia	84	84	78
India	140	152	148
Other countries	213	208	213
Employees outside Finland total	662	669	671
Number of employees by reporting unit as at 31 Dec:	**3,464**	**3,154**	**3,265**
Orion Corporation	2,156	2,141	2,371
Orion Diagnostica Oy	282	NA	NA
Fermion Oy	348	344	358
Foreign subsidiaries	662	669	536
Number of employees by employee category as at 31 Dec:	**3,464**	**3,154**	**3,265**
Blue collar	816	715	719
White collar	1,341	1,237	1,243
Exempts	1,307	1,202	1,303
Average duration of employment, years	11.1	11.3	11.1