

Sustainability at Medartis

Medartis wants to make sustainability pervasive across its core processes and reflected in its corporate culture. It will continue to be an integral part of how it sources, designs, manufactures and distributes its solutions, with the ultimate goal of improving the carbon balance and circularity of its operations. Medartis acts according to its stated mission: "Restoring quality of life". And although patients and its immediate customers – surgeons and healthcare professionals – are at the centre of its thinking, it also considers other stakeholders and social aspects relevant to creating holistic value for its shareholders and society as a whole.

The formal requirements and regulatory framework for environmental and social reporting are increasing, especially for listed companies. This is no longer limited to large companies in high-emission industries but affects companies of all sizes and sectors. At Medartis, the goal has always been to work closely with surgeons to develop highly accurate and innovative products that make a positive contribution to patient outcomes and quality of life. At the same time, Medartis strives to make a positive contribution to society by ensuring that the benefits of its actions exceed the resources consumed. Since its inception 25 years ago, the company has always been on the lookout for ways to optimise its regional footprint and make improvements for its employees and other stakeholders. The trends of recent years together with the Covid-19 pandemic have demonstrated and confirmed the importance of making environmental, social and governance (ESG) principles integral to the way Medartis does business. In 2021, the company decided to collect 'scope I and II' figures, and analyse and optimise internal data more systematically and on a global level. In 2022 and beyond it will enlarge the scope of this endeavour. Medartis is in favor of a system that relies on accountability and self-initiative. The company will therefore continue to drive transparency and monitoring over the coming years. In 2022, the firm will also review its processes to confirm broad alignment with the United Nations Global Compact (UNGC) and identify any opportunities for improvement. Aligning its existing initiatives with the United Nations Sustainable Development Goals (SDGs) is the obvious next step. In addition, Medartis will engage in dialogue with its partners and upstream suppliers to achieve systematic improvements throughout the entire value chain.

Relevance and sustainability analysis

The key topics identified in the 2021 assessment are displayed in the illustration below. By addressing and reviewing these topics regularly, the company ensures long-term performance, identifies high-level risks and opportunities, and strengthens relationships with its stakeholders. The relevance and sustainability overview is based on a top-down assessment of key decision makers within the company. In future, Medartis also wants to include an outside-in perspective by integrating external stakeholders and selected managers into the discussion. To reduce its environmental impact, Medartis has identified the following footprint areas, which mainly relate to a responsible production and supply chain:

Energy efficiency and substitution of carbon energy	Reduction of scrap rates
Traceability and eco-friendly products	Recycling of used raw materials and reduction of auxiliary materials
Smart design and packaging	Further improvements in production efficiency

For these areas, it will measure its impact in terms of carbon, volume, circularity and other environmental indicators.

In 2022 the company will refine the process by including the following stakeholder categories:

Customers	Employees
Academia and opinion leaders	Shareholders/ owners
Patients	Suppliers/ partners

Additional stakeholder groups include:

Media representatives	Notified bodies
ESG and governance rating agencies	Industry associations
Regulators	

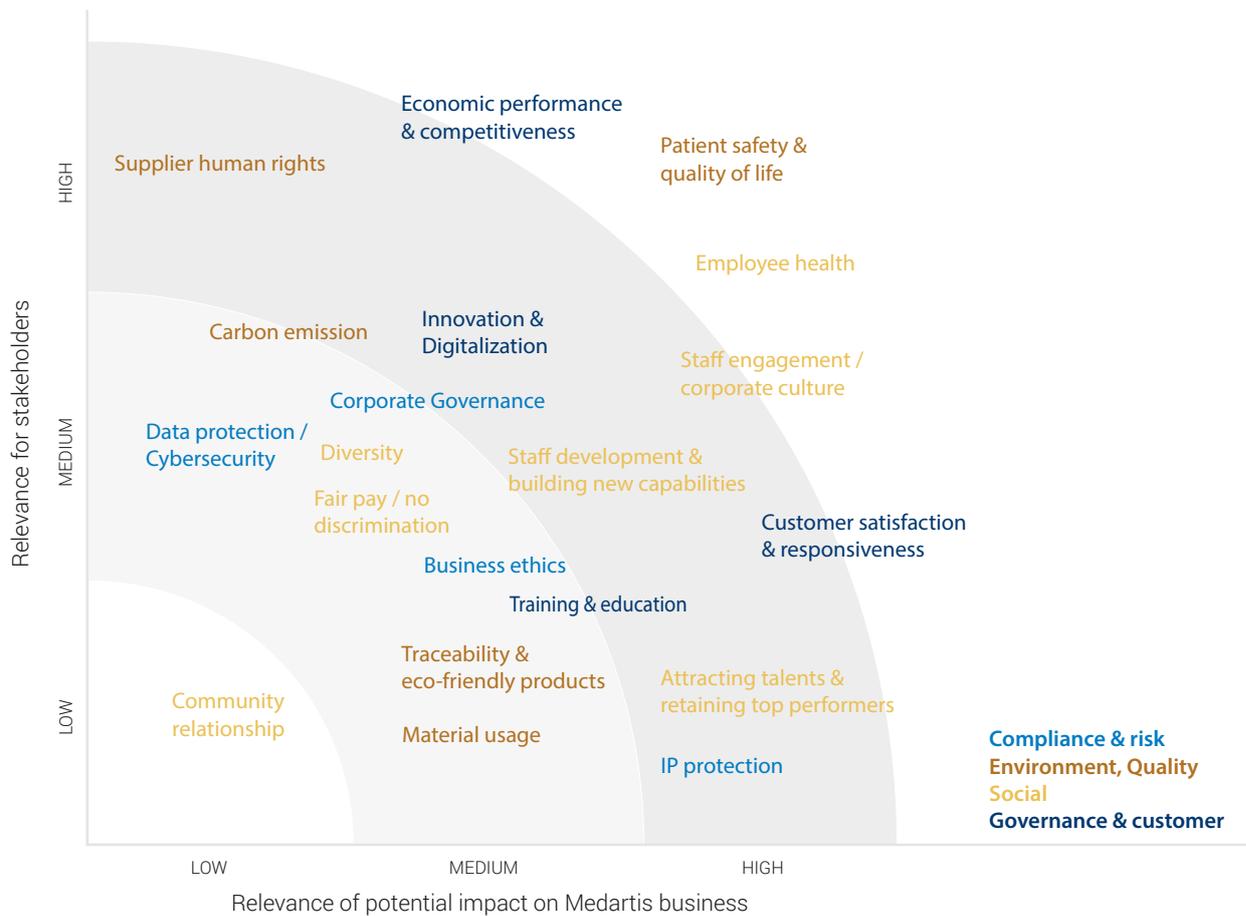
To understand their specific needs, Medartis fosters interactive dialogue and a feedback culture on many levels and through various channels. Here are two examples of how stakeholder demands can change and evolve.

A) A few years ago, portfolio managers were mainly interested in share price development, payout, ROIC and good business practice, while ESG criteria were only used as a means of exclusion in the event of serious violations. Today, ESG topics have become an integral factor for most investors. ESG analysis is often delegated from portfolio managers to dedicated rating agencies, which assess companies according to standardised criteria.

B) With the advent of international hospital networks and outpatient treatment centres, reproducible, reliable and more affordable treatment options have become more important. These networks, many of which belong to large, international companies, are increasingly focused on sustainability, and ethical supply chains are gaining in importance.

As for the environment, the company has also identified activities and initiatives that focus on enhancing the positive impact on employees, customers and society:

Staff engagement/corporate culture	Diversity
Customer satisfaction and responsiveness	Employee health
Attracting and retaining talent and top performers	Corporate governance
Fair pay and gender equality	Charitable contributions



Looking back

Due to the outbreak of the Covid-19 pandemic, the importance of "employee health" suddenly came to the fore. Medartis has constituted local taskforce teams to protect its employees from infection, while also limiting the risk of production or supply chain interruptions. The company has been able to supply all customers with the desired products and services on time. Due to the pandemic, remote working models and working from home have seen a substantial rise. During the various lockdowns, maintaining operations has been a necessity, but the company has also seen these phases as an opportunity to distinguish itself as a modern employer and has since offered its employees a hybrid working model.

"Digitalisation" and "staff engagement" have also become more pertinent as Medartis strives to build a learning, agile organisation that fosters entrepreneurship. That is why all these topics have moved into the upper right quadrant. Our e-learning options for employees, distributors, and customers, livestream training sessions, online onboarding and online leadership and development activities are all important steps in this direction. Medartis advocates a collaborative leadership model, whereby everyone in the organisation is working towards a common goal. For similar reasons, the company also believes that diversity and a complete sense of belonging are a source of creativity and motivation that contributes to business success. Over the last two years, Medartis has reduced the gender gap in its executive board and middle management. Nevertheless, qualifications, track record and cultural fit will remain the most important selection criteria for new Medartis employees.

Production and Supply Chain: Medartis Switzerland is carbon-neutral

As a responsible company, Medartis wants to monitor and optimise its environmental performance regularly to understand the impacts associated with its operations, and to identify opportunities to reduce its footprint. Global warming, the emission of production resources, and the economic use of non-renewable resources are global issues that need to be tackled collectively. Medartis is keen to do its bit in bringing about such improvements.

Surgical plates and screws are the principal products of the company. They are produced from titanium derivative rods or metal blocks on CNC milling and turning machines. In the manufacturing process, water based emulsions and cutting oil is used as a cooling agent during the fabrication process, followed by cleaning, packaging and sterilization. Other indirect production activities relate to metal instruments and surgical containers for use in surgical procedures in hospitals or other inbound treatment centres.

Compared with most manufacturing companies, the impact associated with Medartis' operations is relatively minor, for several reasons. Firstly, Medartis currently manufactures products centrally at a single place in Switzerland, which meets the high Swiss production standards. Secondly, its core activities in metal processing are not a source of heavy emissions. Thirdly, the company does not use heavy materials (such as lead, mercury or manganese), either as raw materials, auxiliary materials or as alloys. Neither does it use raw materials from conflict minerals and it requires its suppliers to ensure that the source is traceable.

Medartis upholds its commitment to operate in an environmentally responsible manner. It achieves this by focusing on the areas where actions and measures will have the greatest impact. As Medartis wants to gain more clarity about the cost-benefit balance of individual measures, especially abroad in its sales subsidiaries, the implant maker has not yet set itself any official volume targets. For the time being, the key priorities remain resource efficiency, energy and water consumption, and waste management. Its biggest environmental impact occurs during the production of final or semi-finished products and, to a much lesser extent, in the development or testing of new products.

Medartis' production and environmental KPI figures are summarised in the table below. As 2020 was an exceptional year due to pandemic restrictions for hospitals, the comparison also includes 2019.

			2019	2020	2021
	Energy				
	Electricity	MWh	3'726	3'948	4'416
	Heating	MWh	612	740	1'080
	Cooling	MWh	705	1'024	932
	Maschine hours	Hours	159'904	137'537	172'144
	Water				
	Water consumption	m3	3'041	4'403	5'571
	Consumption per day	m3	8.3	12.1	15.3
	Cooling water flow rate	m3	250'106	212'467	177'643
	Cooling water per machine hour	m3/Hours	1.6	1.5	1.0
	Compressed air				
	Compressed air	m3	6'722'682	6'400'702	7'318'153
	Energy efficiency	Joule per litre	392.4	395.8	391.2
	Recycling / Reusable materials				
	Titanium recycled (net)	Tons	16.2	13.2	14.4
	Paper/ Cardboard	Tons	10.4	7.9	6.5
	Paper/ Cardboard per capita	kg/headcount	37.8	28.7	21.1
	Office paper consumption	million sheets	2.6	1.7	1.6
	Office paper per capita	sheets/employee	9'418	6'187	5'550
	Special waste				
	Aqueous rinsing liquids	Tons	73.9	92.3	107.7
	Cooling emulsion (for milling machines)	Tons	35.3	21.5	30.8
	Cutting oil (for CNC machines)	Tons	5.6	2.5	1.4
	Other waste requiring control				
	Electrical appliances (SWICO-goods)	Tons	0.3	0.9	0.5
	Wood	Tons	5.6	5.4	8.8
	Others	Tons	0.2	0.4	0.0
	Residential waste				
	Sweepings	Tons	26.4	20.0	21.5
	Sweepings per employee	kg/HC	96.3	72.4	76.6

Note: The above statistics refer to the Swiss site where Medartis has exclusively located its global manufacturing facility, engineering, R&D and all other activities based at headquarters.

In 2019, Medartis decided to conclude a target agreement with the federal government to increase energy efficiency with the help of the Energy Agency for Industry (EnAW). In this way, Medartis is making a significant contribution to the federal government's efforts to use energy efficiently and reduce greenhouse gas emissions.

The Medartis headquarters in Basel obtains 100% of its energy supply for operating the machines and for heating the buildings from renewable sources, mainly hydropower. The waste heat of the industrial plants in the neighbourhood is used not only for heating, but also for cooling, thanks to the largest absorption chiller of its kind in Switzerland. The corresponding district heating powerbox has been certified by TÜV Süd.

In addition, Medartis purchases 100% of its electricity from renewable sources. As such, the Medartis headquarters in Basel is thus carbon-neutral in terms of CO₂ intensity (fuels). The corresponding energy consumption is shown in the same table. In 2022, Medartis will also report its CO₂ emissions according to a generally recognised standard.

Electricity consumption at the headquarters and especially heating increased last year, because we in-sourced several production steps (e.g. washing, cleaning, packaging), which have to be done under clean room conditions. Water consumption also rose for the same reason. The water produced in the clean room during the washing of the implants must meet high standards and be changed frequently. However, the wastewater can be returned to the normal water cycle.



Certificate Agency for Industry



Energycertificate TÜV Süd

Zertifizierte Stromkennzeichnung

- Verbraucherefreundliche, fristgerechte Veröffentlichung
- Geprüfte Strombuchhaltung
- Sicherstellung von aktuellster und höchster Datenqualität

www.tuev-sued.de/stromkennzeichnung



IWB Powerbox, Stückeri

Medartis' main material is titanium and its derivatives. The recycling rate corresponds to approx. 90% of the waste generated in the production process. For this purpose, Medartis separates the metal chips and swarf from the oil residues that arise in the manufacturing process. Due to the pandemic and the reduced hospital capacities, the production output was very erratic in the last two years. In 2020, production volumes were reduced by approx. 20% and in 2021, Medartis registered a strong increase in demand again and production volumes rose accordingly by more than 50%. The company noticed a similar trend for plate, screw and auxiliary units. During this period, titanium consumption increased more or less in direct relation to the production volume. Demand for cooling emulsion decreased compared to the pre-Covid level of 2019, and despite dynamic growth in 2021. The oil consumption in our CNC and turning machines could be massively reduced. The implementation of an oil recovery process achieved its effect. Due to the higher number of machine hours (+8% vs. 2019), the demand for compressed air increased, but energy efficiency was able to be improved due to a new software control system, while the joules per litre were reduced.

Environmental stewardship is part of Medartis' training and education activities and is also embedded in the guiding principles of the company's Code of Conduct, which encourage management, employees and suppliers to integrate environmental protection into their daily responsibilities. Today, supply chain networks are under increasing scrutiny for their social and environmental responsibility, which spurs us on to examine upstream (supply) and downstream (demand) implications. For partner companies and upstream suppliers, Medartis uses the Corporate Social Responsibility Code, which specifies its expectations regarding environmental protection, in addition to social and legal requirements. The document is available on the company's website. These provisions are a supplementary component of supplier contracts and are also subject to subsequent random checks. Medartis requests certificates from suppliers to confirm compliance. These suppliers also have to respect the ETI Base Code (www.ethicaltrade.org), an internationally recognised code of labour practice founded on the conventions of the International Labour Organization (ILO).

In 2021, the main challenge for Medartis' principal production facility in Basel was coping with the strong pick-up in customer demand after a stable development in 2020. Global supply bottlenecks, logistic chain disruptions and surging freight costs made the environment for its production teams even more difficult. Another area of focus in the past year was protecting its personnel from Covid infections in the workplace by continuously updating and implementing a safety concept and conducting information campaigns to encourage the workforce to be cautious outside work, too, and get vaccinated. Thanks to these measures, far-sighted planning by management and the safety stocks of core raw materials, Medartis closed the past year without any significant supply shortfalls. Thanks to lean management and further process optimisation, the company actually extended its gross margin, despite slightly higher freight costs and headwinds from exchange rate fluctuations. Although the production workforce remained more or less stable, at approximately 90 people, output increased by more than 20% to over 3 million articles produced at Basel HQ itself.

New cleanroom adds flexibility and reduces throughput times

With more than 20 years of production experience, Medartis is constantly challenging itself to eliminate waste and steps that do not add value. It is continuously looking for ways to use new technology to improve product attributes, reduce machine times, lower raw material input and manual labour, and improve the workplace (Lean Management). More output with the same resources puts Medartis in a position to minimise its environmental footprint. With an organic growth profile several times higher than GDP, Medartis is focusing on relative energy efficiency rather than absolute energy demand. With this goal in mind, the company is continuing to introduce automation and technology in its factory to ensure precise, time-saving and low-waste production of its screw and plate implants. The introduction of automation enables real-time adjustments for optimal efficiency and helps the company to shift responsibilities from low-skilled manual labour to monitoring, supervision and validation of equipment. Below you will find some examples that the company is currently implementing:

- One important milestone in 2022 is the rollout of its new cleanroom to gain more production flexibility in the future and reduce throughput times. The new addition to the modern facility in Basel will enable Medartis to reduce the cost of packaging and sterilising non-sterile and sterile implants respectively by an average of 20–40%. The lead time of our production is shortened by up to five days due to in-house packaging and transport of three million articles to suppliers and back can be saved. The cleanroom is fully equipped, operational and scheduled to go into operation in spring 2022, as soon as Medartis obtains MDR certification from the notified body.
- Another project, now close to completion, is a semi-automatic warehouse robot from Medartis' warehousing partner Kardex, which will allow Medartis to cope with the strong increase in demand over the coming years, while maintaining the same number of employees.
- By digitalising its production processes, Medartis aims to significantly reduce administrative work, increase the quality of documentation and traceability, and save valuable paper resources with paperless production. The goal is to complete this digitalisation step by the end of 2022.
- By introducing 100% automated measuring cell in screw production, the operations team was able to reduce measuring times in quality inspections of its screws to 25%, increase the quality of the measurements and introduce non-destructive testing, which significantly reduces reject rates.
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100% automated screw measuring cell



Automated central warehouse in Basel



Cleanroom

No compromise on quality and safety

The integrity of Medartis products and the health and safety of patients are paramount and are supported by state-of-the-art quality management systems in production and development. Medartis medical devices are subject to regulatory surveillance at a global level by the appropriate authorities, notified bodies and other regulatory bodies routinely verify that Medartis' processes and products comply with applicable standards, guidelines and regulations, from the initial concept for a product to the end of its lifecycle. The product lifecycle includes the following main steps:

- Product idea
- Product development and design control
- Transfer of the design to manufacturing
- Supplier management
- Monitoring of process stability
- Overall risk management
- Pre-and post-market clinical studies
- Regulatory submissions
- Supervision of sales activities, downstream marketing
- Post-market surveillance

Management is responsible for implementing legal requirements, and controls are in place to ensure product safety in the work environment. The company also applies risk management and design control processes to product development. Medartis further specifies and verifies strict requirements in terms of product traceability and the validation of sterile and non-sterile implants. In addition, the company attaches great importance to possible corrective and preventive actions, should they be necessary. Medartis AG maintains a quality management system certified by TÜV Rheinland LGA Product GmbH following EN ISO 13485:2016, latest effective date 4/2/2020, with validity until 3/2/2023 (reg. no. SX 60146588 0001). TÜV Rheinland LGA Product GmbH certified Medartis AG as compliant with the Medical Device Directive (MDD 93/42/EEC) on 11/9/2019, valid until 26/5/2024 (reg. no. HD 60140582 0001).

In 2021, Medartis successfully passed the stage 1 and stage 2 audits, which were aimed at verifying the quality management system's compliance with the requirements of Medical Device Regulation (MDR) 2017/745. Technical documentation to demonstrate product compliance with MDR 2017/745 is expected to be confirmed by TÜV Rheinland LGA Product GmbH by April 2022. In the US, Medartis medical devices are regulated by the United States Federal Drug Administration (FDA). Implants and specific instruments, are subject to premarket notification submissions. Medartis carefully monitors changes within the regulatory environment in relevant markets and ensures that the products it sells meet the local requirements. In markets where Medartis products are sold indirectly through distributors, the partner company assumes this obligation. At the beginning of 2022, a dedicated internal compliance officer was recruited to meet the increasing national and international obligations in this field.

Engaged employees who are proud to work for Medartis

After a pandemic-related interruption in 2020, where revenues remained stable, Medartis' topline grew strongly again in 2021. To ensure sustainable growth, expand direct contact with the customer base, and become more international, the company added 48 employees to its workforce, bringing its worldwide headcount to 684 in 2021. In addition to general turnover, the company has welcomed and trained more than 10% new employees.

Apart from the creation of new jobs, its largest commitment to people in 2021 was the start of the "Culture Journey", which aims to transform and adapt Medartis' corporate culture. The new culture is intended to encourage and foster entrepreneurial behaviour, collaborative leadership, risk-taking and high performance. The company started with training programmes for its top and senior management in 2021 and will continue with seminars for middle management in spring 2022. The aim is to extend the programme to all employees in 2022. The key to achieving this culture lies in cultivating a player-learner mindset and the company's new values, which are also reflected in a number of people processes, such as the annual review process and annual target setting. At the same time, Medartis has also re-sharpened and revised its Purpose, Vision and Mission Statement. It has developed supportive formats and exchange forums to anchor and democratise the new values at several levels within the organisation in 2022. Regular meetings between the Executive Management Board (EMB) and employees, as well as various focus groups, provide open and constructive dialogue and direct feedback on staff engagement. For this purpose, Medartis organised 'meet-the-EMB' sessions, where a selection of employees can exchange ideas with the management in an informal setting.

In 2022, this format will be extended to all international subsidiaries through "EMB on tour" programme, having started with Australia in December 2021. Over the last year, 10 staff meetings were held with the EMB, plus 16 informal small focus sessions. To drive the necessary change and ensure uptake, Medartis has promoted over 30 "Cultural Change Champions" – employees and HR professionals who are well connected at a local level. These internal influencers develop regional or local initiatives. In 2021, the company also conducted its first global staff survey, which is an important indicator of cultural progress and staff engagement. Employee feedback revealed that talent management, career development and a healthy work-life balance matter to its staff. By contrast, equal treatment and fair compensation are practically assumed to be a given.

In addition, Medartis monitors diversity in terms of age, gender, ethnic origin and educational background. In 2021, the Group's gender diversity remained relatively balanced, albeit with room for further improvement: women account for 36% of all our employees worldwide. The share in management positions is largely the same. Women are especially underrepresented in manufacturing jobs and technical professions – a phenomenon that can be seen throughout the industry.

Diversity and pay equity analysis

Area	Key parameter	2020	2021
Employees	Total headcount	636	684
	Full-time equivalents	616	666
	Part-time employees	81	82
Gender diversity	Female share (total company)	36%	36%
	Women in management position ¹	34%	31%
Turnover, protection and absences	Staff turnover ²	11%	13%
	Absence rate due to work-related accidents ³	0%	0%
	Absence rate due to sickness ³	2.5%	2.2%
	Work-related fatalities	0	0
	Substantiated cases of discrimination / harassment	1	2

Apart from sales, training and education, many of Medartis' core activities are pooled in one location: its headquarters in Basel. This allows for rapid decision-making and optimisation of the value chain. For that purpose, development, quality, production, management and a large part of marketing, event coordination and the supply chain business are located at the headquarters. As a result, 40% of Medartis' worldwide employees are based in Switzerland. In 2019, the Swiss Federal Council put a new federal law on equality into force, which made it mandatory for companies with over 100 employees to provide figures about certain aspects of their pay practices. For Medartis, which aims to treat people equally regardless of their gender, ethnic origin, religion or sexual orientation, this review was an important impetus to systematically calculate and monitor salary discrepancies for its workforce in Basel. Medartis' equal pay analysis during the reporting period has been audited by Ernst & Young and the report did reveal that Medartis does not exert a "gender effect" on salaries. On average, women earn 4.8% less than their male colleagues. Taking into account personal and job-related characteristics such as experience, career history and education, women at Medartis earn 1.6% less than men, which exemplifies that there are no systematic or unjustified salary discrepancies for doing the same job. The figures – which tally with internal statistics on salaries – are explained by the higher number of men in leadership positions, gender-specific demographic differences and the high number of women in part-time positions. The results were communicated to all employees in 2021. The plan is to repeat this analysis at least every four years and also perform such analysis for Medartis' international subsidiaries in 2022.

Medartis continues to offer apprenticeships and internships with the aim of offering jobs to as many participants as possible. In Switzerland, the company currently offers apprenticeships in three areas – commercial, logistics and polymechanics – and employs 10 apprentices. As part of talent and leadership training, the firm has initiated a comprehensive online training programme for its executives in 2021. Participants exchange the theoretical knowledge that they have acquired in small peer-to-peer groups.

Correct and ethical behaviour

The Medartis Code of Conduct defines the company's expectations for ethical behaviour in all its business activities. It prohibits bribery, corruption, unfair competition, misleading marketing harassment, discrimination and unequal treatment. Medartis is committed to providing a workplace free from harassment and unlawful discrimination. The Code is an integral part of its employment contracts and is part of mandatory online training. Additional training is provided on a regional basis in response to employee feedback and other needs. The workforce is obligated to report any violation, suspected violation or misconduct. In 2021, 12 complaints were reported to the Ethics Committee. All allegations were promptly addressed by the committee. One of the complaints was substantiated and resulted in a written warning and one case led to a dismissal. In 2021, no specific concerns were raised relating to human rights violations, so no remediation or mitigation actions needed to be taken.

Health awareness and safety training, are given to all new employees due to their importance for the company. The vigilance and diligence of its employees also resulted in one of its lowest recorded years of lost-time injuries. No workplace fatalities or serious accidents were reported in the course of the year.

Outlook

In the course of 2022, Medartis will establish an ESG Council to oversee and further develop the Group's ESG strategy. As part of the strategy, the company will refine its statistics and involve more partners. This will build the base for detailed ESG reporting that will allow us to define quantified targets and monitor progress on key performance indicators and initiatives. The Board of Directors will approve the ESG strategy, initiatives and targets and receive progress updates on a semi-annual or annual basis.