

Sustainability Report



Table of contents

3	Introduction
8	Governance
10	Strategy
	Focus topics
13	Environmental matters
42	Employee related issues
59	Social issues
65	Combating corruption
73	Respect for human rights
	Indices
79	GRI index
86	Reconciliation table with the Swiss Code of Obligations
90	List of abbreviations
91	Limited assurance report
94	Disclaimer



Introduction

Dear esteemed readers,

We firmly believe that Zehnder Group's sustainable business practices are paramount for our enduring growth and profitability, even amidst challenging market conditions. Embracing sustainability is not only crucial for our long-term success but also a commitment to preserving our planet for future generations. Our holistic approach encompasses environmental, social and governance factors, embedding sustainability into our core business model with a customer-centric focus.

Over the last year, our in-depth sustainability analysis, grounded in the double materiality principle, has been affirmed by encouraging stakeholder survey results, pinpointing our efforts on significant material topics. This collaborative stakeholder engagement is vital for realising our sustainability objectives.

A notable accomplishment this year includes setting our climate targets with the Science Based Targets initiative (SBTi), marking our pledge to achieve net-zero by 2050. We have progressed in understanding our Scope 3 emissions, establishing a solid foundation for accurate analysis. Our biannual employee survey further validates our commitment, reflecting our workforce's appreciation for our respectful, value-driven culture.

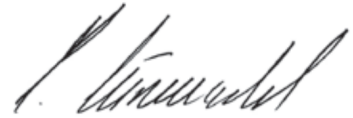
As we look forward, enhancing our supply chain engagement remains a priority due to its significant risks and impacts, despite our limited influence. Proactive risk mitigation and positive impact generation hinge on our close collaboration with stakeholders.

In conclusion, the strides we have made fuel our determination to further advance our sustainability journey. We trust this report reflects the dedication of our employees and partners and we eagerly anticipate sharing our continued progress in the forthcoming years.

With kind regards,



Dr. Hans-Peter Zehnder
Chairman of the Board of Directors



Matthias Huenerwadel
Chairman of the Group Executive
Committee, CEO

Sustainability Report 2023

Our approach to sustainability

As a global manufacturer and provider of indoor climate solutions, Zehnder Group operates within an industry with a significant environmental impact. At the same time, Zehnder is contributing to sustainable living through its controlled ventilation systems equipped with integral heat recovery. A heat exchanger captures and transfers the heat from the outgoing indoor air to the incoming outdoor air, allowing the recovery of a significant amount of the heat that would otherwise be lost during ventilation.

We are striving to create a positive impact for the environment, society and our employees in our day-to-day operations. We aim to reduce our carbon dioxide equivalent (CO₂e) emissions¹ and waste and to close the loop of our products' life cycles. In doing so, we examine the entire value chain, spanning from raw material acquisition and product development through procurement, production and operation to disposal. Step by step, we are involving our stakeholders more closely, particularly our suppliers and customers and building partnerships with peers and actors from other industries. This helps us to develop a common understanding of the opportunities and challenges that present themselves, which allows us to implement effective sustainability measures.

In the 2023 reporting period, we continued our work in the focus topics already defined, while strengthening the foundation of our sustainability strategy. We affirmed our material topics based on the principle of double materiality, conducted an in-depth human rights risk assessment and further developed our guidelines and activities relevant to combating corruption.

As a publicly listed, yet family-controlled company, fostering a positive corporate culture is especially important to us. Internally, we are committed to raising awareness of our sustainability ambitions among our employees, inspiring them to contribute themselves.

Our sustainability goals and strategy are guided by the United Nations (UN) Sustainable Development Goals (SDGs) and the ten principles of the United Nations Global Compact (UNGC), which Zehnder Group committed to in 2022. We actively contribute to initiatives such as the UNGC Ambition Accelerator and UNGC Gender Equality and Human Rights programmes. These principles govern our material sustainability topics and are reflected in essential instruments such as the Zehnder Group's Code of Conduct, our Supplier Code of Conduct and our company values of customer focus, respect, trust, curiosity and openness.

¹ We always refer to CO₂e, including all relevant greenhouse gases (GHG) as per GHG Protocol: Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).



Our approach to reporting

With this Sustainability Report we continue increasing transparency for our stakeholders regarding Zehnder Group's sustainability strategy, reporting our progress as well as the challenges we face. To meet the increasing requirements, our annual Sustainability Report is a work in progress. We report with reference to the Global Reporting Initiative (GRI) Standards and comply with the requirements of the Swiss Code of Obligations. We are gradually working towards implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in the next report and adhering to the European Sustainability Reporting Standards (ESRS) as of the business year 2025 (reported in 2026).

This Sustainability Report comprises the reporting period from 1 January 2023 to 31 December 2023, following the same reporting period as the financial report. Its contents have been compiled based on the material sustainability topics. The report covers the entirety of our business segments and consolidated companies in line with Zehnder Group's Annual Report 2023 (see [Overview of companies](#) in Zehnder Group's Annual Report 2023). The report includes a **limited assurance** by PricewaterhouseCoopers AG for selected key performance indicators (KPIs).

The report is structured as follows: the chapters on **Governance** and **Strategy** give a general introduction, followed by the focus topics of **Environmental matters**, **Employee related issues**, **Social issues**, **Combating corruption** and **Respect for human rights**. The focus topics are based on the five topics identified for non-financial reporting according to the Swiss Code of Obligations. The material topics within the focus topics were identified in line with the principle of double materiality. For each focus topic the main risks related to the respective matters are described in "Impacts, risks and opportunities". The "Management approach" explains how Zehnder is addressing these risks and which policies are adopted. "Implementation and outlook" contains the measures taken to implement these policies and Zehnder's evaluation of the efficacy of these measures, including the main KPIs. Adjustments and deviations based on new data are indicated in the relevant sections. Figures that were not available or published last year are labelled as "n/a".

The indices section contains the [GRI content index](#), a [Reconciliation table with the Swiss Code of Obligations](#) as well as a [List of abbreviations](#).

The key financial figures were already established as part of Zehnder's 2023 Annual Report and are available on the [Zehnder website](#).

Further information

Contact

Zehnder Group AG
Investor Relations
Moortalstrasse 1
5722 Graenichen (CH)

Phone +41 62 855 15 21
investor-relations@zehndergroup.com
www.zehndergroup.com

Publication date: 28 February 2024

The next Sustainability Report for the 2024 financial year is planned for the first quarter of 2025.

Additional information on our commitment to sustainability is available on our [Sustainability website](#).

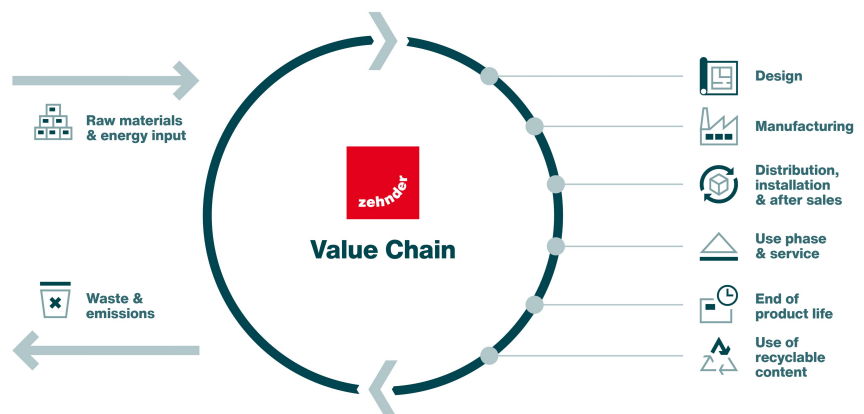
Purpose and structure of organisation

Organisational purpose

Description of the Zehnder Group business model

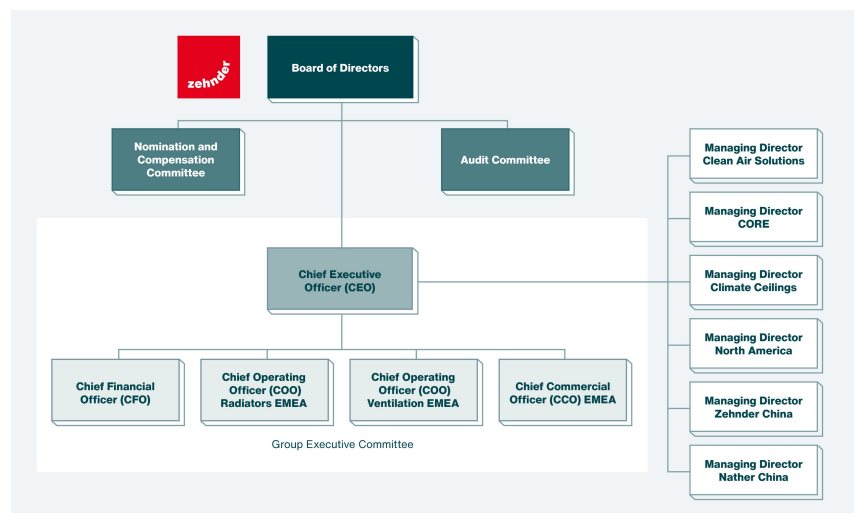
Zehnder Group is a publicly listed company headquartered in Gränichen (CH) providing worldwide leading solutions for a comfortable, energy efficient and healthy indoor climate. Our product and service portfolio comprises heating, cooling, indoor ventilation and air cleaning. The Group is globally active, developing and manufacturing solutions at its own production sites located in 20 countries across Europe, China and North America. Since 2023, the Zehnder Group's Articles of Association have explicitly stated that the company is committed to achieving sustainable and enduring value creation as part of its corporate purpose.

The Zehnder value chain



Organisational structure

Organisation chart Zehnder Group



Sustainability organisation of Zehnder Group

Zehnder Group has established an organisational structure for sustainability that is deeply rooted in the company, defining clear roles and responsibilities.

As sustainability holds utmost importance for Zehnder Group, it falls under the ultimate responsibility of our Board of Directors as part of their duty of care. As part of its overall management of the company and issuing of instructions, the Board of Directors has the explicit task of reviewing and approving the sustainability strategy and sustainability targets as well as approving the annual report on non-financial matters. The topic of sustainability also affects the work of the individual committees of the Board of Directors, such as the related risk assessment in the Audit Committee or the incentivisation in the Nomination and Compensation Committee. Sustainability is discussed regularly, at least biannually, as a standing item on the Board's agenda. Emphasising the significance of sustainability within Zehnder Group, the Chair of the Board of Directors and the Chief Executive Officer (CEO) oversee sustainability matters.

Sustainability expertise is one of multiple criteria when it comes to the recruitment of Board members. Five out of the seven Board members are concerned with sustainability matters on the other boards they sit on. Four external Board members have independently completed various seminars and trainings on the topic. Furthermore, the Board conducts a self-assessment every two years. One of the recurring topics has been sustainability and the fact that it needs to be regularly debated and included in all decision-making processes.

The Sustainability Steering Committee, which is chaired by the CEO and convenes monthly, serves as the central body for sustainability strategy development and decision-making. It comprises the Chair of the Board of Directors and the members of the Group Executive Committee, including the CEO, the Chief Financial Officer (CFO), the Chief Operating Officer (COO) Radiators EMEA (Europe, Middle East and Africa), the COO Ventilation EMEA and the Chief Commercial Officer EMEA. Further members are the heads of Group Marketing & Digital Communication EMEA, Group Sustainability, Investor Relations and Corporate Communications, Group Strategy & Mergers and Acquisitions, Group Human Resources (HR), as well as the Managing Director CAS (clean air solutions) and the Managing Director CORE (heat exchangers).

The Group Sustainability Manager position is a staff position that reports directly to the CEO. This manager supports the Steering Committee and coordinates the development and implementation of mandatory sustainability processes and strategies as well as data analyses, data evaluation and reporting across Zehnder Group. Two full-time equivalents support the Group Sustainability Manager.

Beyond that, Investor Relations and Corporate Communications, Group Procurement, Group Legal, Group Compliance and the Competence Centres for the ventilation and radiator business segments are actively engaged in our sustainability activities.

Materiality and stakeholder analysis

Materiality analysis

The materiality analysis is our foundation for identifying key issues for both the company itself and its stakeholders. Following the double materiality assessment approach, we focused on topics with a significant impact on people, society and the environment that are relevant to our business.

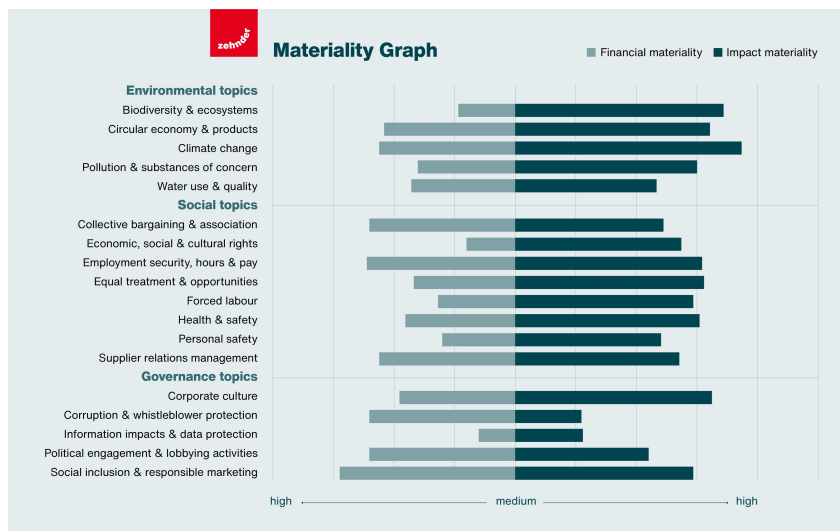
We review our materiality analysis regularly. In 2023, we updated our materiality assessment process and updated the previous materiality matrix to match the GRI and ESRS guidelines, supported by an external consulting agency. Based on a comprehensive list of sustainability matters provided by ESRS¹, Zehnder's sustainability team drew up a net list of about 80 items relevant to Zehnder Group and its value chain. These were further categorised into 20 topics.

We then conducted 41 interviews with "affected stakeholders" and "users of sustainability statements". Affected stakeholders are defined by the ESRS as individuals or groups whose interests are currently affected or could be affected by the undertaking's activities and its direct and indirect business relationships across its value chain. The primary audience for sustainability statements consists of users of general-purpose financial reporting. Additionally, other potential users include governments, analysts and business partners. We analysed our stakeholders accordingly: For affected stakeholders, we interviewed customers, Zehnder employees, end-users of our products, Zehnder Group function heads, Zehnder Group Executive Committee and Board members, suppliers and environmental specialists to act as representatives of the natural world. For users of sustainability statements, we interviewed academics, business partners, government representatives, UNGC representatives, trade union representatives, investors and analysts. Many stakeholders fit into more than one of these categories, but for the purposes of categorisation they were considered to be in the category that we felt best expressed their position relative to Zehnder. In total, we held 34 interviews with affected stakeholders and seven interviews with users of statements. An additional "interview" consisted of the material results of the Human Rights Due Diligence assessment, which was conducted by Zehnder earlier in 2023, making for a total of 42 responses.

The interview partners were presented with the list of 20 topics and asked to identify the top three to five sustainability priorities for Zehnder Group. For each one, insights were identified and categorised as impacts, risks or opportunities and subsequently assessed for materiality, with a specific emphasis on a mid-term perspective spanning five to ten years. If the interviewee had insights into other topics, these were added as well. The assessment included potential and actual effects as well as positive and negative effects. After conducting the interviews, scores for financial materiality and impact materiality were assigned to each topic based on the average results of the insights in that category.

A topic was deemed material if it was significant from a financial or impact perspective or from both perspectives. According to the ESRS, impact materiality is established when a sustainability issue relates to the material actual or potential, positive or negative impacts on people or the environment over the short, medium or long term for the organisation. This includes both direct impact by an organisation's operations, as well as through its upstream and downstream value chain. Financial materiality is established if a

sustainability issue triggers or could reasonably be expected to trigger material financial effects on the organisation. This can include affecting its financial position, financial performance, cash flows, its access to finance or cost of capital over the short, medium or long term.



Materiality matrix depicting the financial materiality and impact materiality of all mentioned subtopics. Two subtopics (Affected communities: Civil & political rights and Workforce: Other work-related rights) were not raised by any stakeholders and thus do not appear on the matrix.

The assessment generally affirmed our understanding of the prevailing material topics. Based on the results of the survey, we identified the most significant material topics for each area of Environment, Social and Governance. Those have been integrated in our sustainability strategy and are elaborated upon in this report. Three topics from the double materiality assessment are not addressed here, as they are already managed through existing processes within Zehnder, outside the realm of the sustainability strategy.

Double Materiality Assessment Material topics identified by the double materiality assessment	Zehnder Sustainability Focus Topics Focus topics of our sustainability strategy
Environmental topics	
Biodiversity & ecosystems	Biodiversity
Circular economy & products	Circular products and innovation
Climate change	Climate action
Pollution & substances of concern	Resource-efficient production; Sustainable purchasing
Water use & quality	Biodiversity
Social topics	
Collective bargaining & association	Respect for human rights; Diversity, equal opportunity, inclusion and decent work
Economic, social & cultural rights	Respect for human rights
Employment security, hours & pay	Diversity, equal opportunity, inclusion and decent work
Equal treatment & opportunities	Diversity, equal opportunity, inclusion and decent work
Forced labour	Respect for human rights
Health & safety	Occupational health and safety
Personal safety	–
Supplier relations management	Sustainable purchasing
Governance topics	
Corporate culture	Attractive employer
Corruption & whistleblower protection	Compliance and fair business practices
Information impacts & data protection	–
Political engagement & lobbying activities	–
Social inclusion & responsible marketing	Respect for human rights

¹ The European Sustainability Reporting Standards (ESRS) are standards that define the rules of the Corporate Sustainability Reporting Directive (CSRD): [ESRS 1: General requirements - Appendix A](#).

Stakeholder analysis

For Zehnder Group, the stakeholder analysis represents an essential component of our Sustainability Report. It enables us to better understand the interests and needs of our relevant stakeholder groups. We define stakeholders as individuals and organisations that have financial, legal, ethical or environmental expectations of Zehnder Group. Zehnder Group aims to create transparency regarding the Group's commitment to sustainable development and to maintaining an open and respectful dialogue with its stakeholders. Through routine, transparent communication, we seek to further strengthen trust in our company and to maintain or establish long-term relationships with our stakeholders.

Communication with stakeholder groups

In 2023, we focused our stakeholder communication on employees, customers, suppliers, investors, financial analysts, rating agencies and non-governmental organisations in particular. Overall, Zehnder uses a variety of tools and channels to communicate with the above mentioned stakeholder groups:

- Through our publications such as the Annual Report and Sustainability Report as well as ad hoc and media releases, we keep shareholders and other stakeholders updated regarding key figures, the status of our sustainability activities and hot-button topics at Zehnder Group.
- Concerning investors, we conduct an annual presentation for analysts and the media. We also participate in various investor and analyst roadshows and conferences as well as host investor days.
- Meetings on corporate governance involve discussions with investors and proxy advisors and are attended by the Chair of the Board of Directors.
- To better understand stakeholder expectations for our sustainability journey, we conducted a double materiality assessment with a range of stakeholders.
- We regularly share information with our customers during trade fairs, customer visits and training courses.
- We are in frequent contact with sustainability rating agencies.
- Through our active engagement in a number of areas, we are in close touch with subject matter experts and specialists of various organisations, like the UNGC and similar.
- Performing our supplier screening, assessments and audits, we work closely with our high-risk suppliers when it comes to sustainability.

Environmental matters: Introduction

Charting a sustainable future

As a manufacturer of indoor climate solutions, we have a special responsibility towards the environment. Our ambition goes beyond selective improvements, as we aspire to decouple growth from environmental harm, while working towards net zero by 2050 and circularity. Already today, our heat recovery ventilation systems help our customers save heating energy, while our ventilation-as-a-service models for clean air solutions reduce the demand for new resources and embedded greenhouse gas (GHG) emissions.

During the 2023 reporting period, we structured our actions to reduce our environmental impact in four topics: **Circular products and innovation**, **Climate action**, **Resource-efficient production** and **Biodiversity**. These topics address several matters identified in our **double materiality assessment**.

Impacts, risks and opportunities

Impacts

Starting from raw material extraction and production, extending through operations in our supply chain, to our in-house assembly and the use phase, our products entail diverse ecological impacts. Our biggest environmental impacts stem from raw materials and the use phase of our electrical products during their lifetime. The primary raw materials we use are aluminium and steel, both extracted in energy intensive processes causing high GHG emissions and pollution. However, the fact that our products, such as radiators, are made from durable materials ensures a long product life cycle. With clean air solutions, Zehnder is able to create a positive impact by ensuring greater reuse of our products. These solutions are almost completely offered through a subscription model, operating as a “product as a service” business. The service includes all equipment, installation, air filters and regular filter changes, maintenance, repairs as well as air quality measurements for as long as customers desire. If a customer cancels the service agreement, Zehnder uninstalls its equipment and refurbishes the air cleaning units, making them ready for reuse at another customer installation.

Our CO₂e emissions contribute to global climate change. Zehnder’s principal climate impact originates from the energy consumption during the use phase of Zehnder’s sold electrical radiators, heating and cooling systems throughout the lifetime of these products (Scope 3 emissions – use phase). This is by far the biggest impact in terms of emissions. The Scope 1 (direct emissions from the production) and Scope 2 (indirect emissions from purchased energy) CO₂e emissions are mainly caused by the consumption of electricity and gas for processes such as welding, drying, surface coating, generation of compressed air and heating for coating or injection moulding in Zehnder’s production sites. Since ventilation system production is mainly an assembly operation, their Scope 1 and 2 emissions are comparably low. Climate change also impacts human rights as it affects people’s rights through its effects. Compared to the carbon footprint laid out above, Zehnder’s products have a positive impact on GHG emissions during the use phase which is not reflected in GHG accounting. Zehnder’s controlled ventilation systems with integral heat recovery generate a positive impact and contribute to a more sustainable living. Our customers benefit from the reduced demand for energy, as our systems recover a

significant amount of the heat that would otherwise be lost during ventilation. This avoids emissions throughout our products' lifetime, when compared to alternative baseline ventilation.

Our production also has impacts in terms of waste, wastewater, hazardous substances, polluting air emissions and water consumption. Our chroming facilities generate substantial amounts of wastewater and sludge. At all our sites comprehensive wastewater treatment is implemented. Wastewater and solid waste can include contaminated quartz sand, ammonia and production waste, which can harm human health and the environment. Our radiator production, including metal manufacture, assembly and painting, is quite resource-intensive, especially regarding energy, water and waste and entails higher potential impacts concerning hazardous substances. In contrast, our ventilation system units focus on assembly and therefore require fewer natural resources. Further relevant waste products stem from packaging such as protective film that is wrapped directly around the radiators to protect them against damage and contamination during transportation and installation. Reducing materials and waste in our own operations as well as in the supply chain has therefore been identified as a potential improvement.

Our activities also have an indirect impact on biodiversity despite intact and biodiverse ecosystems being vital to successful business practices. The key drivers of potential impact on biodiversity include land-use change associated with the construction of buildings that use our products, pollution of air, soil or water and direct exploitation of natural resources, such as metals and minerals. We are also aware of the interdependency between ecosystem loss and human rights, as adverse impacts on biodiversity also negatively affect rights holders in local communities.

Risks and opportunities

Failing to manufacture in an ecological manner entails several risks, including increased operational costs, supply chain vulnerability, regulatory compliance issues, reputational damage and reduced market competitiveness. Long-term resource scarcity and employee dissatisfaction are further potential risks. Climate-related physical risks such as extreme weather events or water scarcity might lead to disruption of our own operations or our supply chain. The fact that our main emissions stem by far from Scope 3 presents a risk, as our influence on up- and downstream activities is limited. For ventilation products, in particular, the potential shift from new construction to renovation due to climate change and saving embedded carbon stored in buildings is a major risk as our current products are often targeted in new construction projects.

With changing customer demands, opportunities for Zehnder include product design for energy efficiency, durability and repairability, working towards circularity and general business models based on circularity. In addition, given climate change is leading to rising temperatures, there is a growing market for cooling solutions for indoor climates.

Circular products and innovation

Promoting sustainability through longevity, reuse and carbon reduction

Management approach

Zehnder works to reduce the environmental impact of its products along three axes: continuously improving the longevity, repairability and upgradability of new products to prolong the product life cycle, using recycled materials in production and refurbishment of products. These actions are key to improving the environmental impacts of our products and maintaining our market perception as a detail-oriented and high-quality company. These improvements are also necessary to avoid greenwashing, so that our products' benefits and environmental credits can be honestly advertised and the financial benefits reaped accordingly.

To understand our products' environmental footprint, we use life cycle assessments (LCAs). Our approach is to build inhouse know-how on LCAs to ensure a complete consideration of ecological aspects in all our processes.

A big part of the solution is to minimise the use of primary materials for products and packaging. Our greatest challenges are the limited availability and high costs of recycled materials. When the technology and capacities become available and economically viable, our goal is to incorporate carbon-reduced steel in a selected range of products. This steel will be produced using less CO₂e-intensive energy sources, such as hydrogen generated from renewable energies and electricity rather than heat derived from coal combustion. Currently, we are observing the market to determine the exact capacities and price development of more sustainable materials.

As for guidelines, the Group adheres to the regulations on repairability of the individual countries we operate in. Internally, we follow our Circular Design Guideline developed in the reporting year.

Zehnder's Group Sustainability Engineer, a member of Group Sustainability, is responsible for LCA coordination and support of the Competence Centres. The position was newly created in 2023. The Group Sustainability Engineer is tasked with developing in-house LCA expertise, while the Competence Centres are responsible for achieving our targets regarding circular products and innovation. They manage and coordinate the implementation of measures across the Group, aggregate and analyse relevant KPIs from the production sites and regularly report to the Sustainability Steering Committee. Due diligence is applied through a close collaboration between the sustainability team and the Competence Centres, where products are evaluated on and improved for their environmental impact, as for example recyclability of materials, repairability of products and selection of raw materials. Completed LCAs of products serve as the input for environmental product declarations, which are being requested by customers and generally require certification, which ensures the quality and accuracy of the methodology and results of the documents at hand. In addition to this, data concerning recyclable input materials are collected from the business unit on an annual basis to monitor progress in this regard.

Implementation and outlook

To implement the above management approach and policies, we outlined two ambitions, each underpinned by one or more targets and monitored via specific KPIs.

Ambition: Understand and improve the environmental impacts of our products

Conduct life cycle assessments for each product family/technology

Status:

Our target is to complete at least one LCA for each product family or technology. So far, three LCAs for radiators, one for an air ventilation product family and five for air distribution systems have been conducted. We built up expertise in LCAs and understand the main impact categories of our products. Today, our Group Sustainability Engineer and a team of five employees trained in this regard conduct LCAs internally and implement lessons learned. We are still behind our target to conduct one LCA for every product family.

Outlook:

In 2024, we will continue our work towards achieving our ambitions by conducting further LCAs as per the priority list in the Group Product LCA Directive for 2024 and start conducting LCAs for products designed in our overseas locations. This will give us a thorough understanding of the status quo and lead the way for future improvements. We strive for a 20% improvement in environmental impact for new products launched after 2025 based on the EF 3.1 Environmental Footprint method recommended by the European Commission.

Ambition: Increase the durability and circularity of our products by promoting reuse, repair, refurbishment, recycling and recovery

Develop and apply a Circular Design Guideline

Status:

As a first step we created a Circular Design Guideline to ensure that circularity is incorporated in all new product developments. The first draft was completed at the end of 2023. The guideline defines a set of deliverables for the development of new products and is a working document to be regularly updated based on new technological developments.

Outlook:

We will roll out and apply the Circular Design Guideline for all new product developments in our Competence Centres (Radiators Europe, Comfosystems Europe, Clean Air Solutions and CORE) to improve our productivity and product circularity in general and achieve the target for new product developments, i.e. 20% improvement in environmental impact for new products launched after 2025 as stated above.

Pilot ventilation-as-a-service and refurbishment business models

Status:

Today 5% of our total net sales stem from ventilation-as-a-service model, from our clean air solutions business. In addition, our team in the Netherlands maintains close communication with customers who express a preference for refurbished ventilation products over new ones. This is the reason for the tenders running in the Netherlands.

Outlook:

We aim to pilot business models for ventilation-as-a-service and refurbishment to gradually increase our revenue from this segment. By 2030, a significant part of our net sales should stem from refurbished products/service business, including revenue from clean air solutions.

Increase the share of recycled raw materials in our products**Status:**

The share of recycled raw materials differs per product category, as do the measures aimed at increasing this share. A high percentage of the aluminium used in radiators consists of recycled material. As for air distribution products, Zehnder requires that new development projects have a recycled content of at least 25% of polymer. Nevertheless, for the majority of our products, we mainly use new materials for reasons related to cost, design and quality. Accordingly, the proportion of recycled plastic across the entire product portfolio is still very low. Securing reasonable and reliable data from our suppliers is challenging.

Outlook:

To further increase the share of recycled raw materials in our products, we will start a concept phase in our Competence Centres (Radiators Europe, Comfosystems Europe, Clean Air Solutions and CORE) for new products manufactured, with more than 80% of raw materials recycled and based on a design in which at least 80% of the components are recyclable. Our 2030 target is to use a significant share of recycled raw materials for most of our products.

Increase the share of recycled packaging materials**Status:**

In 2023, we achieved a Group-wide total of 54% of recycled packaging materials, excluding pallets and based on estimations of our business units. Zehnder has successfully eliminated the use of Styrofoam. For radiator packaging materials, a project was initiated to achieve an 85% share of recycled packaging materials. Currently, our radiator products boast an 80% recycled material rate for cardboard and 5 to 10% recycled material rate for plastics. As for purchased primary products, the reduction of packaging materials is only possible to a certain extent, as packaging also serves as protection.

Outlook:

Our goal is to achieve 80% recycled or reusable packaging materials (excluding pallets) for both inbound and outbound transportation by 2025, a target that has been defined for our Competence Centres (Radiators Europe, Comfosystems Europe, Clean Air Solutions and CORE). For the remaining 20% of new (not recycled) packaging materials in 2025, we commit to striving for the highest ecolabel standards (excluding pallets).

Conduct feasibility study for reusable and/or recycled pallets**Status:**

We realised in the reporting year that due to many reasons, our share of reusable pallets is relatively low for Europe, whereas all our pallets are made of used wood at our largest production site in Canada.

Outlook:

In 2024, we plan to do a feasibility study on whether and how we can increase the reusability of our pallets used in our inbound and outbound transportation. We will also assess the recycled content of the pallets currently in use to determine the feasibility of increasing this percentage.

GRI 301: Materials 2016**Disclosure 301-1 Materials used by weight**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total weight of materials that are used to produce and package the organisation's primary products and services during the reporting period	t	79,652	91,878	-13.3%
Total weight of materials that are used to produce and package the organisation's primary products and services during the reporting period, by non-renewable materials	t	68,936	78,677	-12.4%
Total weight of materials that are used to produce and package the organisation's primary products and services during the reporting period, by renewable materials	t	10,716	13,201	-18.8%

GRI 301: Materials 2016**Disclosure 301-2 Recycled input materials used**

Indicator description	Unit of measure	2023	2022	Change from prior year
Percentage of recycled input materials used to manufacture the organisation's primary products and services	%	19.6	n/a	n/a

GRI 301: Materials 2016**Disclosure 301-3 Reclaimed products and their packaging materials**

Indicator description	Unit of measure	2023	2022	Change from prior year
Percentage of reclaimed products and their packaging materials for business segment Radiators Europe	%	–	–	–
Percentage of reclaimed products and their packaging materials for business segment Residential Ventilation Europe	%	–	<0.1	n/a

The data for this disclosure has been collected by asking the Competence Centres (Radiators Europe and Residential Ventilation Europe) how many products have been reclaimed and sold.

Climate action

Science-based targets for decarbonisation

Management approach

Our goal is to decrease CO₂e emissions in Scope 1 and 2, originating mainly from our internal production processes, as well as in Scope 3, associated with the upstream and downstream activities related to our products. We consider all GHGs as per GHG Protocol¹. Zehnder's primary focus is on improving energy efficiency and increasing the proportion of renewable energy.

We also estimate and report the amount of energy saved through heat recovery by our ventilation systems. These systems operate through a counter-current temperature exchange, allowing for air exiting the building via the ventilation system to efficiently transfer its heat to air entering the building, thus maintaining a greater amount of heat within the system and saving considerably on heating energy and costs, while reducing local heat pollution into the air. Over the course of their lifetimes, our heat recovery systems sold in 2023 will save our customers approximately 8.9 times as much energy as they consume compared to traditional ventilation and the subsequent replacement of lost heat, resulting in 39.2 million gigajoules of avoided energy consumption. Overall, heat-recovery ventilation releases considerably less CO₂e than traditional ventilation, as the savings in heating emissions are greater than the increased electricity consumption of a heat-recovery system. Our heat-recovery ventilation units are calculated to produce approximately 369,055 tCO₂e over the course of their lifetimes, whereas traditional ventilation units plus replacement of lost heat are calculated to produce approximately 2,290,633 tCO₂e over the same period. This results in 1,921,578 tCO₂e of avoided emissions, or a ratio of emissions produced by HRV to emissions produced by traditional ventilation and replacement heating of 1 to 6.2².

Our strategic goal is to boost Zehnder's resilience to climate-related risks. Climate change was the most discussed topic amongst stakeholders during the double materiality assessment, reflecting the importance of action in this field. These changes are vital both to reduce Zehnder's impact and contributions to climate change, as well as to meet new regulations and adapt to the changing market as customers seek to reduce their own emissions.

In June 2023, Zehnder committed to set net-zero climate targets with the SBTi, a collaboration between the Carbon Disclosure Project, the UN Global Compact, the World Resources Institute and the World Wide Fund for Nature (WWF). The SBTi provides a methodology for companies to define science-based emission reduction targets in accordance with the Paris Climate Change Convention 1.5-degree target. The target Zehnder plans to submit for validation in early 2024 incorporates both near- and long-term emission reduction pathways as well as an overarching trajectory, aiming for a net-zero state by 2050.

Each of Zehnder's Competence Centres as well as the Group Executive Committee are responsible for achieving the targets regarding climate action. They manage and coordinate the implementation of measures across the Group, aggregate and analyse respective KPIs from the production sites and regularly report to the Sustainability Steering Committee. Due diligence processes include the annual collection of climate-related data from our business units and an internal and external review in accordance to an internal procedure. Furthermore, most of our environmental data (energy, waste and GHG emissions) are audited by an external assurance company (see the **Limited assurance report**).

¹ Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

² Emissions and energy consumption are calculated for the full product use phase, and do not include emissions at other phases such as production, transport or disposal. Grid emissions are split by country and are calculated at 2021 levels for the full product lifetime (source: Department for Environment, Food and Rural Affairs (DEFRA)). Lost heat is replaced by heating systems, split between heat pumps (Energy Efficiency Ratio (EER) = 3 as a conservative choice for renewables) and natural gas heaters (85% conversion efficiency). Natural gas heaters were selected as the conservative choice for fossil-based heating. The ratio of natural gas heaters to heat pumps is country-dependent and is generated using values provided by the Institute of Building Technologies and Energy at Lucerne School of Engineering and Architecture (HSLU), Switzerland, based on current national ratios of fossil-to-fossil-free heating methods.

Data sources for heating per country: USA: [US Energy Information Administration](#); Canada: [Canada Energy Regulator](#); China: [US Energy Information Administration](#); EU: [EuroStat](#); UK: [Statista](#); Switzerland: [Energie Schweiz](#); Other: Assumption 80-20 split between fossil and fossil-free. Assuming exclusively heat pump heating and global grid decarbonisation (20g CO₂e/kWh) reduces the ratio to 1 to 3.5.

These calculations and the assumptions made therein have been verified by the Institute of Building Technologies and Energy at Lucerne School of Engineering and Architecture (HSLU), Switzerland.

Implementation and outlook

To implement the above management approach and policies, we defined two ambitions, each supported by one or more targets and monitored via specific KPIs.

Ambition: Reduce greenhouse gas emissions and achieve net-zero emissions by 2050 for Scope 1, 2 and 3

Submit science-based targets for validation by the SBTi

Status:

Our objective, which is yet to be approved by the SBTi, is to achieve a 55% reduction in Scope 1 and 2 emissions and a 33% reduction in Scope 3 emissions by 2033, compared to the 2023 baseline. This aligns with the SBTi pathway for the Scope 1 and 2 near-term target that limits global warming to 1.5°C (above pre-industrial levels) and the Scope 3 near-term target that limits global warming to well below 2°C (above pre-industrial levels). This corresponds to an annual reduction target between 2023 and 2033 of 5.5% for Scope 1 and 2 and 3.3% for Scope 3 emissions. The target also means full decarbonisation of Zehnder's operations and value chain, mandating an emissions reduction of 90% by 2050 across all Scopes, with any residual emissions neutralised through carbon removals. Emphasising our commitment, we have linked parts of the long-term bonus of our Group Executive Committee to achieving our science-based targets for Scope 1 and 2. An integral approach to curbing our Scope 1 and 2 emissions entails a steadfast commitment to enhancing energy efficiency, phasing out fossil-based energy and elevating the proportion of renewable energy (standing at 22% in the reporting year). The focus lies on our radiator manufacturing, which accounts for the majority of our total Scope 1 and 2 emissions.

In 2023, we further improved the quality of our corporate carbon footprint calculation for Scope 1, 2 and mainly Scope 3, in adherence with the GHG Protocol, as the aim is to use the reporting year 2023 as our base year for our science-based targets. This prompted a few methodological changes, leading to a restatement of the 2022 figures for improved comparability with 2023. Total

2023 Scope 1, 2 and 3 emissions amounted to 2,740,926 tCO₂e, reflecting a 13% increase from 2022 (restated, more details can be found in the footnotes of the GRI 305 tables). With our refined methodology in place, we are poised to consistently report data from 2024 onward.

The Scope 1 GHG emissions in 2023 amounted to 9,290 tCO₂e, indicating an 8% decrease from 2022 (restated, more details can be found in the footnote of the GRI 305-1 table). The Scope 2 GHG emissions (market-based) in 2023 amounted to 8,290 tCO₂e, which represents a 17% decrease from 2022 (restated, more details can be found in the footnote of the GRI 305-2 table). The decrease in both Scope 1 and 2 emissions is mainly due to less fossil fuel for heat and less electricity consumption caused by a lower production volume. Scope 1 and 2 emissions still account for less than 1% of our total Scope 1, 2 and 3 carbon footprint (0.64% in 2023).

For Scope 3, we considered all applicable categories according to the GHG Protocol (see footnote in the GRI 305-3 table). The Scope 3 GHG emissions of the reporting year amounted to 2,723,347 tCO₂e, which is more than 99% of Zehnder's total carbon footprint. The largest contributor (78% of our total carbon footprint but also of Scope 3 emissions) is the emissions generated throughout the use phase of the electrical products sold across their lifetime. The GHG emissions from the use phase increased by 9% from 2022 (restated, more details can be found in the footnote of the GRI 305-3 table). This increase is mainly due to a change in emission factors (source: International Energy Agency (IEA)), while activity data remained roughly the same. The second-largest contributor to our Scope 3 emissions is purchased goods, constituting approximately 19% of the total emissions. The primary categories include metals, plastics and electronics. These emissions increased by 32% from 2022 (restated, more details can be found in the footnote of the GRI 305-3 table). This increase is due mainly to methodological changes and more appropriate emission factors.

Outlook:

In 2024, we plan to submit the established targets for validation to the SBTi and aim to develop a decarbonisation roadmap. This roadmap will in particular cover energy reduction, with a focus on improving our energy mix and implementing efficiency initiatives by 2033 to achieve our near-term Scope 1 and 2 targets. To lower energy consumption, we will persist in investing in energy-efficient equipment, including improved lighting and cooling/heating systems and transition to chemical paint removal as an alternative to thermal processes. For instance, we have replaced the refrigeration system at our site in Bolesławiec (PL) to decrease the energy needed for cooling. Also, we will continue to invest in photovoltaic systems at our production sites. In Vaux-Andigny (FR), we will assess the possibility of replacing our gas-powered heating with geothermal systems by conducting a feasibility study in 2024. Beyond this, we plan to switch from gas to electricity to power the furnace in 2025 in Vaux-Andigny (FR). Finally, we plan to install a heat pump to further reduce emissions in Zwolle (NL).

Ambition: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

Analyse the recommendations of the Task Force on Climate-related Financial Disclosures and further embed climate risks into risk management process and internal control system

Status:

In the reporting year, we started to create a roadmap along which we would like to adhere to the TCFD's recommendations as well as to further integrate our climate risks into our internal risk management procedures.

Outlook:

To prepare our TCFD reporting in 2024, we will analyse climate-related risks and opportunities based on their likelihood and severity. In addition, we will include

climate-related risks in our regular risk assessment processes and in our internal control system.

GRI 302: Energy 2016

Disclosure 302-1 Energy consumption within the organisation

Indicator description	Unit of measure	2023		2022	Change from prior year
Total fuel consumption from non-renewable sources	GJ	165,077	✓ PwC CH	180,306	-8.4%
Total fuel consumption from renewable sources	GJ	41	✓ PwC CH	61	-31.9%
Total electricity consumption	GJ	145,123	✓ PwC CH	170,803	-15.0%
Total heating consumption	GJ	13,264	✓ PwC CH	15,193	-12.7%
Total cooling consumption	GJ	-	✓ PwC CH	-	-
Total steam consumption	GJ	-	✓ PwC CH	-	-
Total electricity sold	GJ	3,675	✓ PwC CH	4,050	-9.2%
Total heating sold	GJ	-	✓ PwC CH	-	-
Total cooling sold	GJ	-	✓ PwC CH	-	-
Total steam sold	GJ	-	✓ PwC CH	-	-
Total NET energy consumption	GJ	323,506	✓ PwC CH	366,367	-11.7%

Sold electricity is excluded from NET energy consumption.

The methodology follows the GHG Protocol. Scope 1 and 2 activity data has been centrally collected through Zehnder's Hyperion Financial Management system (consolidation tool). Reporting units were pre-defined and data collection adhered to the operational control approach.

The source of the conversion factors used was DEFRA 2023 v1.0.

GRI 302: Energy 2016

Disclosure 302-2 Energy consumption outside of the organisation

Indicator description	Unit of measure	2023		2022	Change from prior year
Energy consumption outside of the organisation	GJ	36,855,652	✓ PwC CH	n/a	n/a

The energy consumption information only encompasses the use of sold and leased products. Data for other up- and downstream categories is unavailable. The estimated highest energy consumption is based on the use of sold products, calculated over their product lifetime. On the other hand, the energy consumption for leased products is calculated solely for the reporting year.

GRI 302: Energy 2016

Disclosure 302-3 Energy intensity

Indicator description	Unit of measure	2023		2022	Change from prior year
Energy intensity ratio for the organisation using energy consumption within the organisation	GJ/TEUR	0.42	✓ PwC CH	0.45	-5.86
Energy intensity ratio for the organisation using energy consumption outside of the organisation	GJ/TEUR	48.70	✓ PwC CH	n/a	n/a
Energy intensity ratio for the organisation using energy consumption both within and outside of the organisation	GJ/TEUR	49.12	✓ PwC CH	n/a	n/a

The energy included in the intensity ratio is fuel, electricity and heating.

The energy consumption information only encompasses the use of sold and leased products. Data for other up- and downstream categories is unavailable. The estimated highest energy consumption is based on the use of sold products, calculated over their product lifetime. On the other hand, the energy consumption for leased products is calculated solely for the reporting year.

The organisation-specific metric (the denominator) chosen to calculate the ratio was net sales (EUR 762.1 million in 2023 and EUR 812.5 million in 2022).

Energy circularity

Renewable energy

Indicator description	Unit of measure	2023	2022	Change from prior year
Energy circularity: Renewable energy in % of total net energy consumption	%	21.7	23.2	-1.4pp

Only refers to energy consumed within the organisation.

GRI 305: Emissions 2016**Disclosure 305-1 Direct (Scope 1) GHG emissions**

Indicator description	Unit of measure	2023	2022	Change from prior year
Gross direct (Scope 1) GHG emissions in metric tons of CO ₂ equivalent	tCO ₂ e	9,290 ✓ PwC CH	10,138	-8.4%
Biogenic CO ₂ emissions in metric tons of CO ₂ equivalent	tCO ₂ e	186 ✓ PwC CH	170	9.5%

Scope 1 emissions consist of 64% fossil heat and cold, 35% fossil fuel for vehicles and 1% others.

The base year for the calculation is the reporting year (2023). The rationale for choosing it were changes in methodology and increased data quality compared to the previous year.

Emission factors are taken mainly from DEFRA 2023 v1.0.

Data is consolidated according to the operational control approach as per the GHG Protocol.

The methodology follows the GHG Protocol and the calculation was performed in Microsoft Excel. There were no specific assumptions made for the calculation of Scope 1 emissions.

The 2022 figures were restated due to a change in emission factor source from ecoinvent 3.8 to DEFRA 2023 v1.0.

GRI 305: Emissions 2016**Disclosure 305-2 Energy indirect (Scope 2) GHG emissions**

Indicator description	Unit of measure	2023	2022	Change from prior year
Gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO ₂ equivalent	tCO ₂ e	8,290 ✓ PwC CH	10,045	-17.5%
Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO ₂ equivalent	tCO ₂ e	14,410 ✓ PwC CH	16,677	-13.6%

The base year for the calculation is the reporting year (2023). The rationale for choosing it were changes in methodology and increased data quality compared to the previous year.

Emission factors for electricity consumption are mainly taken from IEA 2023 and if available supplier-specific emission factors provided by Zehnder (only for market-based). For district heat from fossil fuels DEFRA 2023 v 1.0 was used and for district heat from renewable sources ecoinvent 3.9.1 (modified to fit Scope 2 definition) assuming 25% each biogas, biomass (wood chips), solar collector and geothermal. Calculated with Intergovernmental Panel on Climate Change (IPCC) 2021 100a Global warming potential (GWP).

Data is consolidated according to the operational control approach as per the GHG Protocol.

The 2022 figures were restated due to a change in emission factor source from ecoinvent 3.8 to IEA 2023.

GRI 305: Emissions 2016**Disclosure 305-3 Other indirect (Scope 3) GHG emissions**

Indicator description	Unit of measure	2023	2022	Change from prior year
Gross other indirect (Scope 3) GHG emissions in metric tons of CO ₂ equivalent	tCO ₂ e	2,723,347 ✓ PwC CH	2,415,107	12.8%

Scope 3 emissions consist of 20% purchased goods from third-party suppliers, 76% use of sold products and 4% others.

Biogenic CO₂ emissions are not available separately and are therefore included in total emissions.

Included in the calculation are all relevant categories as per the GHG Protocol: purchased goods, fuel- and energy-related activities, upstream transportation, generated waste during operations, business travel, employee commuting, downstream transportation and distribution, use of sold products, end-of-life treatment of sold products and downstream leased assets.

Emissions from purchased services and capital goods are excluded as they do not contribute more than 1% to total emissions and are calculated based on monetary spend contrary to all other categories.

Emissions from upstream leased assets are already included in Scope 1 and 2 emissions. As Zehnder does not manufacture intermediate products, emissions from the processing of sold products are not applicable. There are no franchises and no investments.

The base year for the calculation is the reporting year (2023). The rationale for choosing it were changes in methodology and increased data quality compared to the previous year.

Emission factors are taken from ecoinvent 3.9.1 calculated with IPCC 2021 100a GWP, DEFRA 2023 v1.0, IEA 2023 and EPA 2023 emission factors for GHG inventories.

The methodology is based on the GHG Protocol and the calculation was performed in Microsoft Excel and SimaPro 9.5.0.0.

The 2022 figure was restated due to a change in emission factor source from ecoinvent 3.8 including upstream emissions for electricity generation to IEA 2023 emission factors without upstream emissions for electricity generation.

Assumptions:

Purchased goods: When the material composition was unclear, the highest emission factor within the category was utilised. In European business units, Zehnder estimated the percentage of recycled input materials for certain metals and packaging materials. If a European business unit did not provide a percentage, Zehnder's estimations were applied.

Purchased services and capital goods: Both categories are computed using a spend-based methodology and collectively contribute less than 1% to the total footprint. Consequently, they are not included.

Fuel- and energy-related activities: Emissions from the upstream value chain of electricity production were calculated with IEA 2023 factors (as also applied for Scope 2). For all other inputs, Well-to-Tank (WTT) emission factors were utilised from the same sources employed for Scope 1 calculations.

Up- and downstream transport: If there was no lorry size given 16–32 metric tonnes were assumed and if no emission standard was provided EURO5 was assumed. The average weight of a parcel sent by Zehnder was assumed to be 4.5 kg/parcel based on the average given by some business units. In cases where it was not possible to distinguish between transport distances from different suppliers, the average one-way distance was assumed and applied as the one-way distance for aggregated suppliers.

Generated waste: Following the cut-off by allocation approach emissions from waste treatment processes from preparation for reuse, recycling and other recovery operations are cut-off and do not contribute to the carbon footprint.

Business travel: To calculate emissions from the use of private and rental cars for business travel the emission factor was assumed to be 50% diesel and 50% petrol.

Employee commuting: Emissions from the use of electric cars and scooters for commuting are calculated using basic assumptions from ecoinvent for kWh/km and calculated using the country-specific emission factors from IEA.

Upstream leased assets: not applicable for Zehnder.

Processing of sold products: not applicable for Zehnder.

Use of sold products: The emission factor for electricity used by sold products throughout their lifetime is not adjusted for changes in emissions per kWh over time. For projected sales numbers, where it was unclear which products would be sold in which country and in what quantities, a weighted emission factor based on electricity consumption of sold products per country from January to September was applied.

End-of-life: The end-of-life treatment for sold products only considers the non-recyclable parts, following the cut-off by allocation approach. This is based on the assumption that recyclable components will undergo recycling.

Downstream leased assets: Emissions from the use of leased products are only calculated for one year, unlike the use of sold products where the entire lifetime of each product is considered.

Franchises: not applicable for Zehnder.

Investments: not applicable for Zehnder.

GRI 305: Emissions 2016

Disclosure 305-4 GHG emissions intensity

Indicator description	Unit of measure	2023		2022	Change from prior year
GHG emissions intensity ratio for the organisation (Scope 1 and 2)	tCO ₂ e/ TEUR	0.02	✓ PwC CH	0.02	–
GHG emissions intensity ratio for the organisation (Scope 3)	tCO ₂ e/ TEUR	3.57	✓ PwC CH	n/a	n/a
GHG emissions intensity ratio for the organisation (Scope 1, 2 and 3)	tCO ₂ e/ TEUR	3.60	✓ PwC CH	3.00	0.60

Direct Scope 1, energy indirect Scope 2 (market-based) and/or indirect Scope 3 emissions were included in the intensity ratios.

The organisation-specific metric (the denominator) chosen to calculate the ratio was net sales (EUR 762.1 million in 2023 and EUR 812.5 million in 2022).

The 2022 figures were restated due to changes in direct and indirect emission calculations (see above).

Resource-efficient production

Using ecological resources responsibly

Management approach

Using the planet's resources responsibly is mandatory for all our business units. We set specific targets to significantly reduce our energy consumption (see [Climate action](#)), waste generation, use of hazardous substances, polluting air emissions and water consumption.

Local and national laws and regulations guide our policies for waste, hazardous substances, air emissions and water. These regulations establish minimum standards for wastewater and pollutant emissions, which we continually monitor in collaboration with the relevant authorities. All our sewage sludge and waste are treated and disposed of properly and therefore do not pose health or environmental risks. To reduce our own waste from packaging and purchased primary products, we work to reduce rejects in our production, develop circular products and introduce reusable pallets.

To measure the water stress at our sites, we assessed all our site locations with the Aqueduct Water Risk Atlas¹. We flagged 14 sites in locations which have a water stress ranking of “high” or “extremely high”, meaning that the percentage of total water demand compared to available renewable surface and groundwater supplies was 60% or higher. Three of the 14 are radiator production sites with water-intensive processes such as painting, plating and cutting. The flagged sites are radiator production sites in Manisa (TR), Vaux-Andigny (FR) and Dachang (CN). The other eleven sites in water stress locations either do not use water in production or are offices.

For radiator production, water for the processes is extracted from springs or the drinking water supply network. We introduced a new target to minimise freshwater consumption in our radiator production sites by increasing water reuse and recycling as well as regular leakage checks to achieve closed water circuits. Wastewater is pre-treated at our sites in Manisa (TR), Vaux-Andigny (FR), Bolesławiec (PL), Gränichen (CH) and Lahr (DE) and finally processed by a public sewage treatment plant. The efficiency of the pre-treatment is monitored by the responsible public authority. At all our operations, independent bodies regularly test the quality of our wastewater to ensure compliance with legal obligations.

Each of Zehnder's Competence Centres and production units is responsible for achieving the targets regarding resource-efficient production. They manage and coordinate the implementation of measures across the Group, aggregate and analyse respective KPIs from the production sites and routinely report to the Sustainability Steering Committee. Due diligence processes include the certification of our sites. Nine of our 24 production sites are certified according to ISO 14001 on environmental management systems, including all radiator production sites in Europe and China. Also, environmental data is collected annually from our operations and verified thoroughly at Group level. Furthermore, most of our environmental data (energy, waste and GHG emissions) are audited by an external assurance company (see the [Limited assurance report](#)).

¹ The [Aqueduct Water Risk Atlas](#) developed by the World Resources Institute is an online global database of local-level water risk indicators and a global standard for measuring and reporting geographic water risk.

Implementation and outlook

To implement the above management approach and policies, we formulated an ambition which is supported by five targets and monitored via specific KPIs.

Ambition: Significantly reduce our energy consumption, waste generation, use of hazardous substances, polluting air emissions and water consumption

Increase waste recycling

Status:

In 2023, the share of waste to recycling or recovery amounted to 84%. Regarding radiators, we have established programmes to repair production rejects, preventing waste and reintegrating the product into the manufacturing process. While this is time-consuming and sometimes more expensive than producing a new part, it helps us to reduce the amount of steel and aluminium scrap in production. At our production site in Lahr (DE) we have been able to reduce the number of leaking and scrapped elements significantly.

Outlook:

By 2025, we want more than 90% of the waste from all our production sites to be recovered and recycled rather than incinerated or sent to landfill. In the medium term, we strive to end sending waste to landfill by 2028 and to have the first waste-free production site by 2030.

Reduce product returns and increase resale potential

Status:

We try to prevent product returns from our customers after delivery. If products are returned, they should go to resale. However, in 2023, we noticed that the number of product returns on a consolidated level was not insignificant and that most returns had to be scrapped due to the lack of coordinated processes on how to bring the products back to the manufacturer to ensure they were ready for resale.

Outlook:

We are aiming for a significant reduction of unwanted product returns from customers and to increase the resale portion of these returns significantly. As a basis, we will analyse the factors contributing to returns and assess the condition of the returned products.

Replace hazardous substances with non-hazardous substances

Status:

We aim to replace hazardous substances in our operations with less hazardous options. We identified that one of the hot spots for hazardous substances is chroming operations in radiator production.

Outlook:

Our target is to substitute 30% of the replaceable hazardous substances with non-hazardous substances by 2025 in our radiator production sites and we are aiming to replace 100% of the technically replaceable substances by 2030.

Reduce polluting air emissions

Status:

We set the target to define measures to reduce polluting, non-GHG air emissions, i.e. nitrogen oxides (NO_x), sulphur oxides (SO_x), persistent organic pollutants (POP), volatile organic compounds (VOC), hazardous air pollutants (HAP), particulate matter (PM) and others¹.

Outlook:

Our aim is to understand the root cause of our polluting air emissions and achieve a 20% reduction in polluting air emissions in our radiator production sites by 2025 as compared to 2023 and a further significant reduction by 2030.

Decrease water withdrawal in production sites located in water-stress areas**Status:**

In 2023, we started a study to optimise water-intensive processes and determine the financial implications of increased water recycling at our individual sites.

Outlook:

Our target for our three sites in water-stress areas – Manisa (TR), Vaux-Andigny (FR) and Dachang (CN) – is to reduce water withdrawal by 10% by 2025, compared to 2023. Furthermore, we strive to reduce the Group-wide water withdrawal by 20% by 2028.

¹ Ozone-depleting substances are not produced, imported or exported. GRI 305-6 is thus not material.

GRI 303: Water and Effluents 2018

Disclosure 303-3 Water withdrawal

Disclosure 303-3a Total water withdrawal from all areas

Indicator description	Unit of measure	2023	2022	Change from prior year
Surface freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Other surface water withdrawal (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total surface water	ML	- ✓ PwC CH	n/a	n/a
Groundwater freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	9.45 ✓ PwC CH	n/a	n/a
Other groundwater withdrawal (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total groundwater	ML	9.45 ✓ PwC CH	n/a	n/a
Seawater freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Other seawater withdrawal (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total seawater	ML	- ✓ PwC CH	n/a	n/a
Produced freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	0.33 ✓ PwC CH	n/a	n/a
Other produced water withdrawal (> 1,000 mg/L total dissolved solids)	ML	0.03 ✓ PwC CH	n/a	n/a
Total produced water	ML	0.36 ✓ PwC CH	n/a	n/a
Third-party freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	76.54 ✓ PwC CH	n/a	n/a
Other third-party water withdrawal (> 1,000 mg/L total dissolved solids)	ML	64.80 ✓ PwC CH	n/a	n/a
Total third-party water	ML	141.34 ✓ PwC CH	n/a	n/a
Total freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	86.32 ✓ PwC CH	n/a	n/a
Total other water withdrawal (> 1,000 mg/L total dissolved solids)	ML	64.83 ✓ PwC CH	n/a	n/a
Total water withdrawal	ML	151.15 ✓ PwC CH	n/a	n/a

The unit of measure ML is used as an abbreviation for megalitre and is equal to 1 million litres.

Water withdrawal was measured in most business units, with some exceptions of very small offices where water withdrawal has been calculated based on instructions provided by the Group.

GRI 303: Water and Effluents 2018**Disclosure 303-3 Water withdrawal****Disclosure 303-3b Total water withdrawal from all areas with water stress**

Indicator description	Unit of measure	2023	2022	Change from prior year
Surface freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Other surface water withdrawal (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total surface water	ML	- ✓ PwC CH	n/a	n/a
Groundwater freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	8.15 ✓ PwC CH	n/a	n/a
Other groundwater withdrawal (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total groundwater	ML	8.15 ✓ PwC CH	n/a	n/a
Seawater freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Surface freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total seawater	ML	- ✓ PwC CH	n/a	n/a
Produced freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	0.33 ✓ PwC CH	n/a	n/a
Other produced water withdrawal (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Total produced water	ML	0.33 ✓ PwC CH	n/a	n/a
Third-party freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	28.41 ✓ PwC CH	n/a	n/a
Other third-party water withdrawal (> 1,000 mg/L total dissolved solids)	ML	64.80 ✓ PwC CH	n/a	n/a
Total third-party water	ML	93.21 ✓ PwC CH	n/a	n/a
Total freshwater withdrawal (≤ 1,000 mg/L total dissolved solids)	ML	36.89 ✓ PwC CH	n/a	n/a
Total other water withdrawal (> 1,000 mg/L total dissolved solids)	ML	64.80 ✓ PwC CH	n/a	n/a
Total water withdrawal	ML	101.69 ✓ PwC CH	n/a	n/a

The unit of measure ML is used as an abbreviation for megalitre and is equal to 1 million litres.

Water withdrawal was measured in all business units at locations with water stress.

GRI 303: Water and Effluents 2018**Disclosure 303-4 Water discharge****Disclosure 303-4a Total water discharge to all areas**

Indicator description	Unit of measure	2023	2022	Change from prior year
Surface freshwater water discharge (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Other surface water discharge (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Groundwater freshwater discharge (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Other groundwater discharge (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Seawater freshwater discharge (≤ 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Other seawater discharge (> 1,000 mg/L total dissolved solids)	ML	- ✓ PwC CH	n/a	n/a
Third-party freshwater discharge (≤ 1,000 mg/L total dissolved solids)	ML	47.05 ✓ PwC CH	n/a	n/a
Other third-party discharge (> 1,000 mg/L total dissolved solids)	ML	69.45 ✓ PwC CH	n/a	n/a
Total freshwater discharge (≤ 1,000 mg/L total dissolved solids)	ML	47.05 ✓ PwC CH	n/a	n/a
Total other water discharge (> 1,000 mg/L total dissolved solids)	ML	69.45 ✓ PwC CH	n/a	n/a
Total water discharge	ML	116.50 ✓ PwC CH	n/a	n/a

The unit of measure ML is used as an abbreviation for megalitre and is equal to 1 million litres.

Water discharge was often not measured and has thus been calculated by the business units, based on clear instructions provided by the Group.

GRI 303: Water and Effluents 2018**Disclosure 303-4 Water discharge****Disclosure 303-4c Total water discharge to all areas with water stress**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total freshwater discharge (≤ 1,000 mg/L total dissolved solids)	ML	11.99 ✓ PwC CH	n/a	n/a
Total other water discharge (> 1,000 mg/L total dissolved solids)	ML	67.09 ✓ PwC CH	n/a	n/a
Total water discharge	ML	79.08 ✓ PwC CH	n/a	n/a

The unit of measure ML is used as an abbreviation for megalitre and is equal to 1 million litres.

Water discharge was often not measured and has thus been calculated by the business units, based on clear instructions provided by the Group.

GRI 303: Water and Effluents 2018**Disclosure 303-5 Water consumption****Disclosure 303-5a Total water consumption from all areas**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total water consumption	ML	34.65 ✓ PwC CH	n/a	n/a

The unit of measure ML is used as an abbreviation for megalitre and is equal to 1 million litres.

Water consumption was always calculated by the business units, based on clear instructions provided by the Group. The assumption was that all business units consume water in some way.

GRI 303: Water and Effluents 2018**Disclosure 303-5 Water consumption****Disclosure 303-5b Total water consumption from all areas with water stress**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total water consumption	ML	22.61 ✓ PwC CH	n/a	n/a

The unit of measure ML is used as an abbreviation for megalitre and is equal to 1 million litres.

Water consumption was always calculated by the business units, based on clear instructions provided by the Group. The assumption was that all business units consume water in some way.

GRI 305: Emissions 2016**Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions**

Indicator description	Unit of measure	2023	2022	Change from prior year
Significant air emissions of nitrogen oxides (NOx)	kg	25,946	n/a	n/a
Significant air emissions of sulfur oxides (SOx)	kg	16,845	n/a	n/a
Significant air emissions of persistent organic pollutants (POP)	kg	16,355	n/a	n/a
Significant air emissions of volatile organic compounds (VOC)	kg	9,368	n/a	n/a
Significant air emissions of hazardous air pollutants (HAP)	kg	16,360	n/a	n/a
Significant air emissions of particulate matter (PM)	kg	3,694	n/a	n/a
Significant air emissions of other standard categories of air emissions identified in relevant regulations: carbon monoxide (CO)	kg	81,408	n/a	n/a

Emission factors for GRI 305-7 are taken from the EMEP/EEA air pollutant emission inventory guidebook 2019.

Emissions were calculated in Zehnder's Hyperion Financial Management system (consolidation tool) and aggregated in Microsoft Excel.

GRI 306: Waste 2020**Disclosure 306-3 Waste generated**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total waste – heavy metals (t/year)	t/year	0.05 ✓ PwC CH	0.07	–27.7%
Total waste – batteries	t/year	1.57 ✓ PwC CH	3.75	–58.1%
Total waste – electronics	t/year	10.02 ✓ PwC CH	10.71	–6.4%
Total waste – fluorescent lamps	t/year	0.71 ✓ PwC CH	0.58	21.8%
Total waste – used oil & emulsions	t/year	53.63 ✓ PwC CH	15.48	246.5%
Total waste – solvents & chemicals	t/year	46.32 ✓ PwC CH	36.71	26.2%
Total waste – printing ink/toners	t/year	1.52 ✓ PwC CH	0.44	246.7%
Total waste – quartz sand/powder	t/year	41.22 ✓ PwC CH	0.20	>500%
Total waste – hazardous sludge	t/year	89.25 ✓ PwC CH	153.83	–42.0%
Total waste – other hazardous waste	t/year	67.77 ✓ PwC CH	41.91	61.7%
Total hazardous waste	t/year	312.06 ✓ PwC CH	263.67	18.4%
Total waste – metals	t/year	4,082.73 ✓ PwC CH	5,331.69	–23.4%
Total waste – plastics	t/year	733.40 ✓ PwC CH	451.09	62.6%
Total waste – paper & cardboard	t/year	1,668.26 ✓ PwC CH	1,541.07	8.3%
Total waste – glass	t/year	0.23 ✓ PwC CH	0.23	–0.2%
Total waste – wood treated	t/year	370.19 ✓ PwC CH	742.42	–50.1%
Total waste – wood untreated	t/year	231.47 ✓ PwC CH	144.86	59.8%
Total waste – residual non-hazardous waste	t/year	1,110.63 ✓ PwC CH	928.30	19.6%
Total non-hazardous waste	t/year	8,196.90 ✓ PwC CH	9,139.64	–10.3%
Total weight of waste	t/year	8,508.96 ✓ PwC CH	9,403.31	–9.5%

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 13,987 metric tons was reported.

GRI 306: Waste 2020**Disclosure 306-4 Waste diverted from disposal****Disclosure 306-4a Total weight of waste diverted from disposal**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total waste diverted from disposal – heavy metals (t/year)	t/year	– ✓ PwC CH	–	–
Total waste diverted from disposal – batteries	t/year	1.45 ✓ PwC CH	0.75	94.6%
Total waste diverted from disposal – electronics	t/year	9.85 ✓ PwC CH	9.51	3.6%
Total waste diverted from disposal – fluorescent lamps	t/year	0.44 ✓ PwC CH	0.50	–11.3%
Total waste diverted from disposal – used oil & emulsions	t/year	26.29 ✓ PwC CH	8.76	200.3%
Total waste diverted from disposal – solvents and chemicals	t/year	12.12 ✓ PwC CH	8.41	44.0%
Total waste diverted from disposal – printing ink/toners	t/year	1.31 ✓ PwC CH	0.42	213.8%
Total waste diverted from disposal – quartz sand/powder	t/year	27.77 ✓ PwC CH	0.20	>500%
Total waste diverted from disposal – hazardous sludge	t/year	25.02 ✓ PwC CH	17.94	39.5%
Total waste diverted from disposal – other hazardous waste	t/year	13.21 ✓ PwC CH	0.05	>500%
Total hazardous waste diverted from disposal	t/year	117.47 ✓ PwC CH	46.53	152.4%
Total waste diverted from disposal – metals	t/year	4,082.73 ✓ PwC CH	5,329.96	–23.4%
Total waste diverted from disposal – plastics	t/year	704.49 ✓ PwC CH	375.24	87.7%
Total waste diverted from disposal – paper & cardboard	t/year	1,635.99 ✓ PwC CH	1,530.41	6.9%
Total waste diverted from disposal – glass	t/year	0.03 ✓ PwC CH	0.03	–1.9%
Total waste diverted from disposal – wood treated	t/year	155.04 ✓ PwC CH	565.55	–72.6%
Total waste diverted from disposal – wood untreated	t/year	205.33 ✓ PwC CH	128.34	60.0%
Total waste diverted from disposal – residual non-hazardous waste	t/year	273.68 ✓ PwC CH	231.02	18.5%
Total non-hazardous waste diverted from disposal	t/year	7,057.28 ✓ PwC CH	8,160.53	–13.5%
Total weight of waste diverted from disposal	t/year	7,174.75 ✓ PwC CH	8,207.07	–12.6%
Total waste diverted from disposal vs. total waste	%	84.32 ✓ PwC CH	87.28	–3.0pp

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 9,874 metric tons waste diverted from disposal was reported.

GRI 306: Waste 2020**Disclosure 306-4 Waste diverted from disposal****Disclosure 306-4b Total weight of hazardous waste diverted from disposal**

Indicator description	Unit of measure	2023	2022	Change from prior year
Hazardous waste prepared for reuse	t/year	11.26 ✓ PwC CH	1.81	522.0%
Hazardous waste recycled	t/year	79.71 ✓ PwC CH	22.86	248.7%
Hazardous waste treated with other recovery operations	t/year	26.50 ✓ PwC CH	21.87	21.2%
Total hazardous waste diverted from disposal	t/year	117.47 ✓ PwC CH	46.53	152.4%

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 46 metric tons hazardous waste diverted from disposal was reported.

GRI 306: Waste 2020**Disclosure 306-4 Waste diverted from disposal****Disclosure 306-4c Total weight of non-hazardous waste diverted from disposal**

Indicator description	Unit of measure	2023	2022	Change from prior year
Non-hazardous waste prepared for reuse	t/year	481.94 ✓ PwC CH	310.54	55.2%
Non-hazardous waste recycled	t/year	6,283.70 ✓ PwC CH	7,388.75	-15.0%
Non-hazardous waste treated with other recovery operations	t/year	291.63 ✓ PwC CH	461.24	-36.8%
Total non-hazardous waste diverted from disposal	t/year	7,057.28 ✓ PwC CH	8,160.53	-13.5%

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 9,829 metric tons non-hazardous waste diverted from disposal was reported.

GRI 306: Waste 2020**Disclosure 306-5 Waste directed to disposal****Disclosure 306-5a Total weight of waste directed to disposal**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total waste directed to disposal – heavy metals (t/year)	t/year	0.05 ✓ PwC CH	0.07	–27.7%
Total waste directed to disposal – batteries	t/year	0.12 ✓ PwC CH	3.01	–95.9%
Total waste directed to disposal – electronics	t/year	0.17 ✓ PwC CH	1.20	–85.6%
Total waste directed to disposal – fluorescent lamps	t/year	0.27 ✓ PwC CH	0.09	215.7%
Total waste directed to disposal – used oil & emulsions	t/year	27.34 ✓ PwC CH	6.72	306.8%
Total waste directed to disposal – solvents & chemicals	t/year	34.21 ✓ PwC CH	28.30	20.9%
Total waste directed to disposal – printing ink/toners	t/year	0.21 ✓ PwC CH	0.02	>500%
Total waste directed to disposal – quartz sand/powder	t/year	13.44 ✓ PwC CH	–	–
Total waste directed to disposal – hazardous sludge	t/year	64.22 ✓ PwC CH	135.89	–52.7%
Total waste directed to disposal – other hazardous waste	t/year	54.56 ✓ PwC CH	41.86	30.3%
Total hazardous waste directed to disposal	t/year	194.59 ✓ PwC CH	217.14	–10.4%
Total waste directed to disposal – metals	t/year	– ✓ PwC CH	1.73	–100.0%
Total waste directed to disposal – plastics	t/year	28.91 ✓ PwC CH	75.85	–61.9%
Total waste directed to disposal – paper & cardboard	t/year	32.27 ✓ PwC CH	10.66	202.9%
Total waste directed to disposal – glass	t/year	0.20 ✓ PwC CH	0.20	–
Total waste directed to disposal – wood treated	t/year	215.15 ✓ PwC CH	176.87	21.6
Total waste directed to disposal – wood untreated	t/year	26.14 ✓ PwC CH	16.52	58.2%
Total waste directed to disposal – residual non-hazardous waste	t/year	836.95 ✓ PwC CH	697.28	20.0%
Total non-hazardous waste directed to disposal	t/year	1,139.62 ✓ PwC CH	979.11	16.4%
Total weight of waste directed to disposal	t/year	1,334.21 ✓ PwC CH	1,196.25	11.5%

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 4,113 metric tons waste directed to disposal was reported.

GRI 306: Waste 2020**Disclosure 306-5 Waste directed to disposal****Disclosure 306-5b Total weight of hazardous waste directed to disposal**

Indicator description	Unit of measure	2023	2022	Change from prior year
Hazardous waste incinerated (with energy recovery)	t/year	98.36 ✓ PwC CH	175.66	-44.0%
Hazardous waste incinerated (without energy recovery)	t/year	2.60 ✓ PwC CH	-	-
Hazardous waste disposed of in a landfill	t/year	46.66 ✓ PwC CH	4.80	>500%
Hazardous waste disposed of in other disposal operations	t/year	46.97 ✓ PwC CH	36.69	28.0%
Total hazardous waste directed to disposal	t/year	194.59 ✓ PwC CH	217.14	-10.4%

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 193 metric tons hazardous waste directed to disposal was reported.

GRI 306: Waste 2020**Disclosure 306-5 Waste directed to disposal****Disclosure 306-5c Total weight of non-hazardous waste directed to disposal**

Indicator description	Unit of measure	2023	2022	Change from prior year
Non-hazardous waste incinerated (with energy recovery)	t/year	612.19 ✓ PwC CH	490.14	24.9%
Non-hazardous waste incinerated (without energy recovery)	t/year	49.10 ✓ PwC CH	78.37	-37.3%
Non-hazardous waste disposed of in a landfill	t/year	470.31 ✓ PwC CH	357.53	31.5%
Non-hazardous waste disposed of in other disposal operations	t/year	8.03 ✓ PwC CH	53.07	-84.9%
Total non-hazardous waste directed to disposal	t/year	1,139.62 ✓ PwC CH	979.11	16.4%

The 2022 figures in the table were partially restated due to errors in the data collection that were identified after the publication of the Sustainability Report 2022, in which a total of 3,920 metric tons non-hazardous waste directed to disposal was reported.

Biodiversity

Contributing to biodiverse ecosystems

Management approach

Our aim is to reduce our impact on nature and biodiversity. To run a successful business, it is vital to protect, restore and promote sustainable use of Earth's ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and biodiversity loss. Not only does our business depend on the resources and economic stability afforded by healthy ecosystems, but as a business we have an ethical and legal obligation to maintain the health of these ecosystems while conducting our business. Our management approach underpins our efforts towards resource-efficient production. Through the adopted measures related to water, waste and pollution, we prevent damage to natural habitats from our activities.

International and local regulations and frameworks guide our biodiversity efforts. We closely follow the developments at a European level regarding biodiversity measures, particularly the Science Based Targets for Nature and the Taskforce on Nature-related Financial Disclosures (TNFD).

We checked whether our operating sites are located close to environmental protection areas and areas of high biodiversity value. Based on the database of the Protected Planet platform¹, none of our operating sites is located in or in the immediate vicinity of protected areas. However, three sites are adjacent to a protected area. These are our business units in Rancate-Mendrisio (CH), in Udenhout (NL) and in Mechelen (BE).

In 2023, we used the WWF Biodiversity Risk Filter to identify biodiversity risks – including physical environmental, socio-economic and socio-environmental factors – and prioritise corporate action on biodiversity. We assessed our 24 production sites in 12 countries as well as 20 of our tier 1 suppliers' sites from 11 countries across our main raw material groups like electronics, steel and polymers as well as prefabricated aluminium radiator bodies. For Zehnder Group's production operations, pollution² was identified as the most significant physical biodiversity risk. Our site in China – producing radiators and ventilation units near the Yellow Sea and the East China Sea – scored highest for total physical risks. Regarding reputational risk, media scrutiny³ was unanimously identified as the most impactful category. Our site in British Columbia, Canada, engaged in appliances and general goods manufacturing with the North Pacific as its seascape, is particularly exposed. Other significant risk types are landslides, water condition, fire hazards and protected areas.

For Zehnder Group's tier 1 suppliers, it was also pollution that was identified as the most significant physical biodiversity risk. One site in Poland, engaged in metals and mining operations and situated near the river Oder, is particularly at risk. In terms of reputational risks, media scrutiny is unanimously identified as the most impactful category, with the highest score recorded for a metals and mining site in the Netherlands, near the North Sea. Other significant risk types are water scarcity, water condition, landslides, protected areas as well as sites of international interest. The eight sites in the metals and mining industry have the worst impacts. Out of these, seven sites are located in Europe with one in the United States.

Group Sustainability in close collaboration with Group Purchasing are responsible for achieving the targets regarding biodiversity. They manage and coordinate the implementation of measures across the Group, aggregate and analyse respective KPIs from the production sites and suppliers and regularly report to the Sustainability Steering Committee. So far, the only due diligence processes in place are that our production units always comply with local legislations when it comes to wastewater treatment, waste disposal or exhaust air of production processes.

¹ The **Protected Planet platform** is the authoritative source of data on protected areas and other effective area-based conservation measures (OECMs), where users can search the World Database on Protected Areas, the World Database on OECMs, the Global Database on Protected Area Management Effectiveness and other information on biodiversity.

² This indicator is based on nutrient, pesticide and air pollution. In our analysis, it mainly refers to air pollution.

³ Media scrutiny indicates whether there has been documented negative news (e.g. incidents, criticism) related to environmental and social issues that can affect a company's reputation. A high-risk score for this indicator is a result of the high dependency of an industry on media scrutiny in combination with a high location risk score.

Implementation and outlook

To implement the above management approach and policies, we defined an ambition that is supported by one target and monitored via specific KPIs.

Ambition: Halt biodiversity loss around our operations and supply chain and integrate nature into our decision making

Assess our main supply chains for materials that are a risk to biodiversity and define measures to improve hot spots

Status:

Based on the WWF Biodiversity Risk Filter assessment we found out that our main impacts on biodiversity are in the deeper supply chain, however, not among the tier 1 suppliers. This is why it is key to expand the assessment beyond tier 1 suppliers and address the topic with the highest-risk suppliers.

Outlook:

By 2025, we want to assess and understand our key materials' supply chains regarding biodiversity impacts, risks and opportunities, which are steel, aluminium, polymers and electronics. We will further analyse in detail our tier 1 suppliers for these materials and collaborate with our suppliers to further identify potential hot spots beyond our direct suppliers. Also, as we identified the main biodiversity risks of our own production units, we will analyse the site-specific physical and reputational risk topics with the sites' management to assess resiliency and elaborate measures. In addition, we want to raise awareness of biodiversity and habitat loss within Zehnder Group and develop measures to help protect species at our sites.

Employee related issues: Introduction

We are Zehnder

Our approximately 3,700 employees¹ are our greatest asset, which is why we want to provide the best possible working environment for them. We consistently strive to improve their well-being as well as their professional and personal development. The social and cultural differences between the various countries we operate in demand that we place equity, fairness, inclusion and diversity at the forefront of our operations.

In the 2023 reporting period, our focus centred on three key topics: **Occupational health and safety**, **Attractive employer** and **Diversity, equal opportunity, inclusion and decent work**. These topics address several matters identified in our **double materiality assessment**.

¹ The number of employees is reported in headcount as an average across the reporting period. Workers who are not employees but whose work and/or workplace is controlled by the organisation are not included.

Impacts, risks and opportunities

Impacts

As an employer, we have a direct impact on our employees' safety and well-being. This includes not only their physical but also their mental well-being.

We also have an impact on our employees' opportunities for development and their work-life balance. Our recruitment and overall HR policies have an impact on gender diversity and equity in terms of gender, pay and opportunities. From a societal perspective, we provide employment and constantly strive to help our employees develop, enhancing their employability and meeting the demand for a highly educated workforce. Our corporate culture also plays a strong role in raising awareness of sustainability among our employees. Promoting sustainability within our company culture, whether through initiatives like recycling and waste reduction or participation in events such as Veganuary, serves to motivate our employees. This encouragement aims to inspire them to embrace more sustainable behaviours in their personal lives as well.

Risks and opportunities

As part of a manufacturing company, our employees sometimes work with processes and machinery that pose potential health and safety risks, particularly processes of metal forming or plastic injection. Managing occupational health and safety (OHS) means ensuring working conditions free of risk to physical and mental health, accidents or injuries insofar as it is possible. Zehnder might lose employees if working conditions are substandard. The local working laws provide the framework, therefore the level of risk varies by country and sector. Balancing these factors is essential for mitigating risk and maintaining a positive impact on both workforce dynamics and the company's global operations.

Above all, for Zehnder, motivated employees are a key resource for innovation and long-term success. Managing the identified risks proactively, based on a strong corporate culture, enables us to remain an attractive employer and business partner.

GRI 2: General Disclosures 2021

Disclosure 2-7 Employees

Indicator description	Unit of measure	2023	2022	Change from prior year
Number of employees by gender – female (headcount)	#	984	945	4.1%
Number of employees by gender – male (headcount)	#	2,683	2,892	-7.2%
Number of employees by gender – diverse (headcount)	#	2	1	100.0%
Number of employees by region – EMEA (headcount)	#	2,794	2,884	-3.1%
Number of employees by region – Asia-Pacific (headcount)	#	461	489	-5.8%
Number of employees by region – North America (headcount)	#	415	466	-10.9%
Total number of employees (headcount)	#	3,669	3,839	-4.4%

The number of employees is reported in headcount as an average across the reporting period.

GRI 2: General Disclosures 2021

Disclosure 2-8 Workers who are not employees

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of workers who are not employees but whose work and/or workplace is controlled by the organisation (headcount)	#	215	491	-56.2%

The number of workers who are not employees but whose work and/or workplace is controlled by the organisation is reported in headcount as an average across the reporting period.

Workers are defined as individuals which are employed via a domestic and/or foreign agency or self-employed. They do not have a contract of employment with Zehnder Group (are not on the payroll), but work is controlled by the organisation inside and/or outside Zehnder premises (covers contractors, suppliers, workers, self-employed people, volunteers, etc.).

Occupational health and safety

Workplace accidents: Our goal is zero

Management approach

As OHS is one of our priorities, we strive for zero fatalities and work-related injuries with serious consequences. We consistently strive to create a culture of safety and responsibility in our operations. While the local OHS laws define the minimum requirements for Zehnder's sites, we work to develop standards for Zehnder Group that go beyond legal requirements. One key instrument for preventing accidents is the certification of our production sites with complex production processes according to international standards. This includes our radiator production sites and all other sites where metal forming and/or injection moulding processes are performed.

At Group level, the EMEA COO Radiators is responsible for the oversight of OHS. This person is a member of the Sustainability Steering Committee and will be responsible for collecting KPIs once a Group-wide reporting process is in place (planned for 2024/2025). To ensure that the standard is adhered to, each site appoints a responsible person to collect KPIs and a responsible person to manage OHS. Due diligence processes include certification of our sites according to ISO or similar standards as well as regular internal and external audits. Furthermore, our OHS data are audited by an external assurance company (see the [Limited assurance report](#)).

Implementation and outlook

To implement the above management approach and policies, we defined an ambition that is underpinned by two targets and monitored via specific KPIs.

Ambition: Create an environment in which we promote occupational health and safety across the organisation

Obtain ISO 45001 certification (or equivalent) of all production sites where metal forming or plastic injection process take place

Status:

By the end of 2023, five of our eight relevant production sites were certified according to ISO 45001 or equivalent. In 2023, we started the certification process of our site in Lahr (DE) to implement the ISO standard. As a result of our measures, in 2023, 84% of our employees were covered by an OHS system compared to 79% in 2022. Furthermore, the rate of work-related injuries for all employees per 200,000 hours worked has decreased from 2.7 to 2.4. While these results are encouraging and show that our efforts are effective, we need to increase our engagement to ensure no work-related injuries occur.

Outlook:

All our production business units where metal forming or plastic injection processes take place will be certified according to ISO 45001 (or equivalent) by 2025.

Create and implement an Occupational Health and Safety Group Directive

Status:

In the reporting year, we identified the need for a Group-wide coordination regarding OHS.

Outlook:

Our goal is to develop and implement an OHS Group Directive for Zehnder Group by 2025. The directive should encompass the Zehnder OHS management system, including compliance with OHS requirements such as ISO standards, mandatory training programmes and continuous monitoring of OHS cases. The objective is to secure ISO or equivalent certification for all production sites engaged in metal forming or plastic injection processes, while other production sites will adopt localised OHS management systems. The basis is the understanding of the local OHS systems to guarantee that all sites comply with respective public standards. Where required, we will draw up annual safety instructions and conduct regular risk assessment of machines and processes. We will analyse all work accidents and provide solutions to prevent further ones from occurring. These include technical solutions such as minimum requirements for machinery as well as measures to improve work organisational practices.

Subsequently, we will facilitate a Group-wide roll-out and implementation of the OHS Group Directive, covering all entities. This involves conducting Group-wide OHS training sessions and providing training materials coupled with ongoing monitoring through internal audits and the tracking of quantitative and qualitative targets. Additionally, we intend to integrate OHS considerations into the supplier screening and assessment process to enhance safety standards throughout the supply chain.

GRI 403: Occupational Health & Safety 2018**Disclosure 403-8 Workers covered by an occupational health and safety management system**

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of all employees and workers who are not employees but whose work and/or workplace is controlled by the organisation, who are covered by an occupational health and safety management system	%	83.6 ✓ PwC CH	79.1	4.5pp
Rate of all employees and workers who are not employees but whose work and/or workplace is controlled by the organisation, who are covered by an occupational health and safety management system that is internally audited	%	54.5 ✓ PwC CH	39.3	15.2pp
Rate of all employees and workers who are not employees but whose work and/or workplace is controlled by the organisation, who are covered by an occupational health and safety management system that is externally audited	%	52.5 ✓ PwC CH	43.3	9.2pp

Total number of employees, i.e. individuals who are in an employment relationship with the organisation: 3,669 employees in 2023 and 3,839 employees in 2022

Total number of workers who are not employees but whose work and/or workplace is controlled by the organisation: 215 workers in 2023 and 491 workers in 2022

GRI 403: Occupational Health & Safety 2018**Disclosure 403-9 Work-related injuries****Work-related injuries for all employees**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of fatalities as a result of work-related injury for all employees	#	- ✓ PwC CH	-	-
Rate of fatalities as a result of work-related injury for all employees	# per 200,000 hours worked	- ✓ PwC CH	-	-
Total number of high-consequence work-related injuries (excluding fatalities) for all employees	#	- ✓ PwC CH	6	-100.0%
Rate of high-consequence work-related injuries (excluding fatalities) for all employees	# per 200,000 hours worked	- ✓ PwC CH	0.2	-0.2
Total number of recordable work-related injuries for all employees	#	73 ✓ PwC CH	88	-17.0%
Rate of recordable work-related injuries for all employees	# per 200,000 hours worked	2.3 ✓ PwC CH	2.7	-0.4

Number of hours worked for all employees: 6,231,245 hours in 2023 and 6,494,497 hours in 2022

The main types of work-related injuries are strains and sprains, cuts, bruises and falls.

GRI 403: Occupational Health & Safety 2018**Disclosure 403-9 Work-related injuries**

Work-related injuries for all workers who are not employees but whose work and/or workplace is controlled by the organisation

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of fatalities as a result of work-related injury for all workers who are not employees but whose work and/or workplace is controlled by the organisation	#	– ✓ PwC CH	–	–
Rate of fatalities as a result of work-related injury for all workers who are not employees but whose work and/or workplace is controlled by the organisation	# per 200,000 hours worked	– ✓ PwC CH	–	–
Total number of high-consequence work-related injuries (excluding fatalities) for all workers	#	– ✓ PwC CH	–	–
Rate of high-consequence work-related injuries (excluding fatalities) for all workers	# per 200,000 hours worked	– ✓ PwC CH	–	–
Total number of recordable work-related injuries for all workers	#	8 ✓ PwC CH	13	–38.5%
Rate of recordable work-related injuries for all workers	# per 200,000 hours worked	3.9 ✓ PwC CH	4.3	–0.4

Number of hours worked for all workers who are not employees but whose work and/or workplace is controlled by the organisation: 410,749 hours in 2023 and 605,558 hours in 2022

The main types of work-related injuries are strain and sprain, cuts, bruises and falls.

GRI 403: Occupational Health & Safety 2018
Disclosure 403-10 Work-related ill health

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of fatalities as a result of work-related ill-health for all employees	#	– ✓ PwC CH	n/a	n/a
Total number of cases of recordable work-related ill-health for all employees	#	2 ✓ PwC CH	n/a	n/a
Total number of fatalities as a result of work-related ill-health for all workers who are not employees but whose work and/or workplace is controlled by the organisation	#	– ✓ PwC CH	n/a	n/a
Total number of cases of recordable work-related ill-health for all workers who are not employees but whose work and/or workplace is controlled by the organisation	#	– ✓ PwC CH	n/a	n/a

The main type of work-related ill health is work-related stress.

Attractive employer

Fostering the well-being of our employees

Management approach

We continuously aim to improve working conditions for our employees. Based on biannual employee engagement surveys, we define measures to increase engagement such as training and opportunities for personal development. This helps us train the next generation of leaders in our own ranks, enabling us to fill vacancies internally and create career perspectives for our employees. In 2023, we were able to achieve a share of 48% internal promotions compared to external hirings of leadership positions. Our goal is to foster a culture of dialogue and feedback. Beyond that, we promote health, well-being and sustainable lifestyles among our employees, knowing that healthy and engaged workers are our most important asset and vital to a healthy planet. Our specific activities vary from country to country, considering cultural differences.

Coordination of the “Attractive employer” topic lies with the Director Group Human Resources and the team. The Director Group Human Resources is member of the Sustainability Steering Committee. The HR teams of the local business units are closely involved and responsible for implementing Group targets and policies at their sites. Furthermore, the line managers play a crucial role in communicating the goals, targets and guidelines to the employees – and in helping them to contribute. In biannual employee engagement surveys, all employees are asked to voluntarily give feedback regarding how attractive Zehnder is as an employer as well as provide any ideas for improvement. In addition, there is an annual data collection for HR-related sustainability data, which is followed by a thorough internal verification process. These data include a key performance indicator to ensure performance reviews are being held regularly with all employees.

Implementation and outlook

To implement the above management approach and policies, we defined three ambitions, each supported by one or more targets and monitored via specific KPIs.

Ambition: Maintain the level of engagement of our employees with Zehnder Group

Address the top three improvement items from the employee engagement survey

Status:

To assess if we are on track regarding our target to increase the level of engagement of our employees, we conducted our biannual employee engagement survey in 2023. The overall results were very positive. Our employees rated all issues covered better than in the last survey of 2021. The category of employee engagement increased by 2 percentage points to 84%. Benchmarked against peers from the industry norm¹, Zehnder ranks with 6 percentage points above the norm. The survey was sent to all employees, out of which 83% responded. More than 9 out of 10 employees agreed that they understood how their work contributed to Zehnder's business objectives and that they support our sustainability ambition, targets and actions. Regarding leadership, 86% felt supported by their line manager and saw them as a role model representing Zehnder values. These results show that employees appreciate our corporate culture and leadership philosophy – and that our

actions defined after our 2021 survey have made an impact. For instance, as the communication of Zehnder's strategy was identified as an area of improvement, the CEO began releasing a video regarding Zehnder's strategy two times a year to increase internal transparency. Additionally, the global Leadership Development Programme supports managers in cascading our strategy to our employees to raise their understanding of their contribution to it. The effectiveness is shown by the fact that 83% of the respondents confirmed that they had a good understanding of their business unit's strategy, representing an increase of 3 percentage points compared to 2021.

Outlook:

In 2024, we will define and implement the activities to tackle the top three areas for improvement identified in the 2023 survey to further increase the level of engagement of our employees. These areas are digital transformation, confidence in the long-term future of Zehnder and information about Zehnder's products and services. Our leaders will conduct workshops with the employees to analyse the reasons behind the rankings and define effective measures for improvement. Our specific goal for the 2025 survey is to keep the engagement level at a minimum of 4 percentage points above the industry norm and achieve a response rate of 85%.

Ambition: Invest in our people, upgrade their skills and promote a culture of lifelong learning for all genders and aim to fill two-thirds of all vacancies through internal promotions for all roles with leadership responsibility

Improve the results of the employee engagement survey question "I receive regular feedback"

Status:

The 2021 engagement survey showed that our employees wished for even more frequent feedback between managers and their direct reports. Consequently, in 2022 and 2023, HR supported managers in improving their capacity to provide regular qualitative feedback. In the 2023 survey, our employees rated the item 2 percentage points higher, increasing to 79%. While this is an above industry-average value², particularly considering our high share of blue-collar employees, we had aimed for a 5 percentage point improvement.

Outlook:

All employees should receive a regular performance review or at least annual feedback. This is why we want to increase not only this rate but also the result of the employee engagement survey question by 3 percentage points in the 2025 survey. One specific measure is an e-learning module that we offer to managers on effective feedback to direct reports. Our vision is to create a culture of ongoing and open discussion, going beyond a focus on regular feedback. As a result, we are now firmly focused on increasing the number of employees who receive a regular performance review.

Provide access to e-learning for all employees

Status:

Although the market is currently challenging for many companies, we did not scale back on our investment in training and development. We remain committed to investing in our most important asset – our employees. Consequently, we moved forward by implementing our e-learning platform and conducting the global Leadership Development Programme for managers in 2023. We rolled out a new e-learning platform in autumn 2023, with deployment in China and the USA pending due to restrictions and logistical constraints. The courses are provided by an external partner and cover a variety of topics, addressing different learning needs, cultural preferences and knowledge levels of our employees. Today, nearly 2,700 (74%) Zehnder employees have access to the platform and its learning catalogue. Once all employees are onboarded, we will proceed to monitor the use of these offers.

Outlook:

Our goal is to offer access to e-learning to all our employees globally by 2025.

Ambition: Promote health, well-being and sustainable lifestyles and become a role model for our employees

Encourage employee engagement with the SDGs and the Zehnder Group sustainability ambition

Status:

In our 2023 employee engagement survey, 92% of the employees affirmed that they support our sustainability ambitions, targets and actions.

Outlook:

Our aim is to sustain employee engagement for the SDGs and Zehnder's sustainability goal at over 90% by 2025. This will be achieved by investing in the training and education of employees to ensure their understanding of our targets, particularly the reasons behind our commitment.

¹ Methodology and benchmarking conducted by Willis Towers Watson (2022/2023).

² The global industry benchmark is defined by Willis Towers Watson. It is the weighted average of survey results from employees in manufacturing companies or organisations engaged in production environments, regardless of job function. The data is based on results from more than 2,100,000 employees (148,245 weighted), being part of 195 recent client studies across the world, with additional global data (updated annually).

GRI 401: Employment 2016

Disclosure 401-1 New employee hires and employee turnover

New employee hires

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of new hires by age group – under 30 years old	%	34.2	35.7	–1.5pp
Rate of new hires by age group – between 30 and 50 years old	%	53.6	47.4	6.2pp
Rate of new hires by age group – over 50 years old	%	12.3	16.9	–4.6pp
Rate of new hires by gender – female	%	32.4	33.1	–0.7pp
Rate of new hires by gender – male	%	67.6	66.9	0.7pp
Rate of new hires by gender – diverse	%	–	–	–
Rate of new hires by region – EMEA	%	70.8	74.1	–3.4pp
Rate of new hires by region – Asia-Pacific	%	10.1	8.3	1.8pp
Rate of new hires by region – North America	%	19.2	17.6	1.6pp
Rate of total new hires	%	11.1	15.1	–4.0pp

Total number of new hires: 407 new hires in 2023 and 580 new hires in 2022

All numbers are rounded, resulting in certain totals that may not precisely add up to 100%. The same applies to all following tables.

GRI 401: Employment 2016**Disclosure 401-1 New employee hires and employee turnover****Employee turnover**

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of employee turnover by age group – under 30 years old	%	27.8	22.7	5.1pp
Rate of employee turnover by age group – between 30 and 50 years old	%	15.1	12.8	2.3pp
Rate of employee turnover by age group – over 50 years old	%	11.0	9.7	1.3pp
Rate of employee turnover by gender – female	%	14.7	15.8	–1.1pp
Rate of employee turnover by gender – male	%	15.6	12.1	3.5pp
Rate of employee turnover by gender – diverse	%	–	–	–
Rate of employee turnover by region – EMEA	%	13.5	12.2	1.2pp
Rate of employee turnover by region – Asia-Pacific	%	18.2	16.6	1.7pp
Rate of employee turnover by region – North America	%	25.1	13.7	11.3pp
Rate of total employee turnover	%	15.4	13.0	2.4pp

Total amount of employee turnover: 564 employees in 2023 and 498 employees in 2022

GRI 404: Training and Education 2016**Disclosure 404-1 Average hours of training per year per employee**

Indicator description	Unit of measure	2023	2022	Change from prior year
Average hours of training that our employees have undertaken, by gender – female	h	17.3	12.0	5.3
Average hours of training that our employees have undertaken, by gender – male	h	20.7	6.5	14.2
Average hours of training that our employees have undertaken, by gender – diverse	h	8.0	24.0	–16.0
Average hours of training that our employees have undertaken	h	19.8	7.8	11.9

GRI 404: Training and Education 2016**Disclosure 404-3 Percentage of employees receiving regular performance and career development reviews**

Indicator description	Unit of measure	2023	2022	Change from prior year
Percentage of total employees who received a regular performance and career development review	%	89.7	74.9	14.8pp

Internal promotion

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of internal promotions vs. external hiring by employee category – management positions (L1–L4)	%	33.3	42.1	–8.8pp
Rate of internal promotions vs. external hiring by employee category – non-management positions	%	31.7	12.1	19.5pp
Rate of internal promotions vs. external hiring for employees with leadership responsibility	%	47.9	n/a	n/a

L1–L4 refers to leadership levels 1 to 4.

Non-management positions are positions beyond leadership level 4.

An employee with leadership responsibility is formally responsible and supervising at least three other employees.

Employees with access to e-learning

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of employees with access to e-learning	%	73.6	n/a	n/a

Employees that support the Zehnder sustainability ambitions and targets

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of employees that support the Zehnder sustainability ambitions and targets	%	92.0	n/a	n/a

This rate is based on the 2023 employee engagement survey.

Diversity, equal opportunity, inclusion and decent work

Cultivating workplace inclusivity

Management approach

Zehnder Group places great value on diversity, equal opportunity, inclusion and decent work. We are actively working on building an organisation that fosters a zero-tolerance approach towards harassment, bullying or discrimination of any form. We believe that we can achieve this only by creating a diverse work environment and providing decent work and equal pay. To identify potential gaps, it is crucial to maintain complete transparency throughout the Group regarding pay and reward principles as well as standardised roles and responsibilities. This will be a significant focal point in the short-term future. With increased pay data transparency across the Group in years to come, we will be able to fully report on the annual total compensation for the organisation's highest-paid individual as well as the median annual total compensation for all employees.

Good working conditions and high diversity among employees have a positive impact on hiring success but also on corporate culture. It is still challenging to hire women in some roles, due to the nature of our industry - nevertheless, we strive for a better gender diversity over the upcoming years.

We developed a Group Anti-Harassment Directive and a Group Diversity, Equity and Inclusion Directive have been in place since January 2023. Starting 2024, we will link parts of the long-term incentive of our Group Executive Committee to achieving the gender diversity target of the senior management team.

The responsibility for coordinating the "Diversity, equal opportunity, inclusion and decent work" theme, under the category of "Attractive employer", rests with the Director Group Human Resources and the corresponding team. The Director Group Human Resources is a member of the Sustainability Steering Committee. The HR departments of the local business units are closely involved and responsible for implementing Group targets and policies at their sites. Furthermore, the line managers play a crucial role in communicating the ambitions, targets and guidelines to the employees – and in helping them to contribute. Due diligence measures include the four-eyes principle, which is applied in all HR-related processes. In addition, Group HR is working on an HR reporting policy to create transparency as well as drive performance throughout the Zehnder business units along several clearly defined KPIs. For example, in the most recent years, wage ratios between the highest compensation and median compensation of our employees for each of our organisations at a given geographical location have been calculated through our annual sustainability data collection. In addition, the global annual leadership team meeting and the Leadership Development Programme are used to create awareness and train the global senior management teams across all business units on the material topics surrounding diversity, equal opportunity, inclusion and decent work.

Implementation and outlook

To implement the above management approach and policies, we defined two ambitions, each supported by one or more targets and monitored via specific KPIs.

Ambition: Apply a zero-tolerance approach to harassment, bullying and discrimination at all times

Train employees in anti-harassment and discrimination

Status:

To promote diversity within our Group, we rolled out a diversity, equity and inclusion training campaign for senior and mid-level managers in 2023, with 51 of 125 managers having taken part to date. We also have a communication channel through which our employees can anonymously report cases of suspected harassment (more details about the Integrity Line can be found in [Compliance and fair business practices](#)).

Outlook:

By 2025, in addition to all managers, we will roll out training on anti-harassment and discrimination for all employees as well. We aim to integrate these topics via regular training concerning bias and anti-harassment and to ensure non-discriminatory HR processes.

Ambition: Create a diverse work environment and provide decent work and equal pay

Achieve gender diversity

Status:

In 2023, 18.3% of the company's senior management team was female¹. To promote gender equality, we launched accelerator programmes in France and Poland in 2022 and 2023. Initiatives included awareness raising, investing in women-specific facilities, providing lifting equipment to minimise heavy lifting for all employees and introducing more flexible working hours. Both business units have defined measures as well as targets regarding gender and ethnicity ratios for the next ten years. The French production sites aim to double the number of female employees from 10% to 20% between 2022 and 2030. Therefore, they want to make all positions eligible to women by 2030. This includes, for instance, plans to automate processes and the introduction of new machines. To promote diversity, the site opened its doors to schools during French Industry Week. The findings and lessons learned from both pilot projects are to be shared with the HR community at Zehnder in 2024.

Outlook:

By 2026, we aim to have 22.5% female and diverse employees in senior management roles. Our target is to further increase this percentage to 30% by 2030.

Further securing equal pay

Status:

Our internal tools for assessing compensation ratios are not yet available but will be implemented as part of a pilot project next year. Due to a lack of full transparency on pay data Group-wide, we are unable to share accurate data on compensation ratios by gender and/or employee categories.

Outlook:

Our EU sites will be ready for equal pay audits by the end of 2025. The basis will be provided by a pilot group across six countries that we will launch in 2024. In the medium term, we are working towards auditing all EU sites for equal pay by 2027, while all our sites globally are to be audited by 2028. In addition, we work on developing a foundation for pay transparency and equal pay, internally as well as externally. To this end, we will develop a global job catalogue and further invest in the digitalisation of HR data across Zehnder Group.

Increase the portion of employees receiving a living wage

Status:

Following the definition of the UNGC, a living wage means a wage that enables workers and their families to meet their basic needs. While all our employees

always receive the local legal minimum wage, where legal minimum wage laws exist, our routine analysis consistently reveals that the absolute majority of our employees at our sites earn at least a living wage. However, it has also revealed disparities, where at some sites a portion of our employees do not receive a living wage according to the definition of the UNGC.

Outlook:

We aim to define our approach towards living wages as defined by the UNGC and to understand the root causes of the gaps. Our mid-term goal is to substantially increase the portion of employees receiving a living wage across the entire organisation by 2028.

¹ Senior management refers to Zehnder's job positions within L1–L3.

GRI 405: Diversity and Equal Opportunity 2016

Disclosure 405-1 Diversity of governance bodies and employees

Diversity within the Board of Directors

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of individuals within the Board of Directors by age group – under 30 years old	%	–	–	–
Rate of individuals within the Board of Directors by age group – between 30 and 50 years old	%	14.3	28.6	–14.3pp
Rate of individuals within the Board of Directors by age group – over 50 years old	%	85.7	71.4	14.3pp
Rate of individuals within the Board of Directors by gender – female	%	28.6	28.6	–
Rate of individuals within the Board of Directors by gender – male	%	71.4	71.4	–
Rate of individuals within the Board of Directors by gender – diverse	%	–	–	–

GRI 405: Diversity and Equal Opportunity 2016**Disclosure 405-1 Diversity of governance bodies and employees****Diversity within the Group Executive Committee**

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of individuals within the Group Executive Committee by age group – under 30 years old	%	–	–	–
Rate of individuals within the Group Executive Committee by age group – between 30 and 50 years old	%	40.0	40.0	–
Rate of individuals within the Group Executive Committee by age group – over 50 years old	%	60.0	60.0	–
Rate of individuals within the Group Executive Committee by gender – female	%	–	–	–
Rate of individuals within the Group Executive Committee by gender – male	%	100.0	100.0	–
Rate of individuals within the Group Executive Committee by gender – diverse	%	–	–	–

GRI 405: Diversity and Equal Opportunity 2016**Disclosure 405-1 Diversity of governance bodies and employees****Diversity among employees**

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of employees by age group – under 30 years old	%	13.4	13.4	–
Rate of employees by age group – between 30 and 50 years old	%	52.0	53.1	–1.1pp
Rate of employees by age group – over 50 years old	%	34.6	33.5	1.1pp
Rate of employees by gender – female	%	26.8	24.6	2.2pp
Rate of employees by gender – male	%	73.1	75.3	–2.2pp
Rate of employees by gender – diverse	%	<0.1	<0.05	n/a

Gender diversity among senior management

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of senior management members (L1–L3) by gender – female	%	18.3	18.0	0.3pp
Rate of senior management members (L1–L3) by gender – male	%	81.7	82.0	–0.3pp
Rate of senior management members (L1–L3) by gender – diverse	%	–	–	–

L1–L3 refers to leadership levels 1 to 3.

GRI 406: Non-discrimination 2016

Disclosure 406-1 Incidents of discrimination and corrective actions taken

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of incidents of discrimination during the reporting period	#	–	n/a	n/a

Trained employees for harassment, bullying and/or discrimination

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of trained employees for harassment, bullying and/or discrimination	%	25.9	n/a	n/a

Social issues: Introduction

Promoting ethical and transparent business practices in our partnerships

As a global company, we aim to guarantee high ethical standards when doing business with our partners. We are committed to minimising negative impacts and to creating a positive change that benefits both the people in our supply chain and the countries we source raw materials from. We see strong supplier relations based on transparency and trust as an opportunity to achieve a higher product and sustainability performance.

This is a cross-cutting topic affecting different stakeholder groups. In this chapter we focus on **Sustainable purchasing**, addressing the material matters “Supplier relations management”, “Pollution & substances of concern” and “Water use & quality” which have been identified in our **double materiality assessment**. Related social aspects are presented in the chapters **Employee related issues** and **Respect for human rights**.

Impacts, risks and opportunities

Impacts

In complex supply chains like ours with thousands of suppliers, potential negative impacts are inherent. In addition to the environmental impacts referred to above (**Environmental matters**), the production of our raw materials implies potential negative social impacts, such as health and safety issues, forced labour, child labour and modern slavery along our supply chain.

Risks and opportunities

Identifying and addressing these issues requires substantial resources and introduces a new dimension to the role of procurement, as each new supplier may mean new risks and vulnerabilities. These changes make procurement more complex. At the same time, cost efficiency is key to economic sustainability – while customers are not necessarily willing to pay the cost of sustainable products. Not addressing the identified issues entails the risk of potential reputational damage.

By promoting fair labour practices, adequate protection of vulnerable groups and transparent governance we can meet our sustainability targets and further strengthen our reputation as a fair and ethical business partner. In addition, there are opportunities to work with large, established suppliers that help us minimise the above risks, receive premium products and implement sustainability measures together in a trustful partnership.

Sustainable purchasing

Upholding ethical standards in the supply chain

Management approach

To achieve sustainable purchasing practices, we need to extend our sustainability standards to our entire value chain. The key instrument in this regard is our Supplier Code of Conduct¹ in effect since 2021. We require suppliers to sign a binding commitment to our Supplier Code of Conduct or an equivalent standard. The Supplier Code of Conduct covers all Environmental, Social and Governance (ESG) pillars and focuses particularly on supply-related risks concerning human rights, corruption as well as health and safety. Our Supplier Code of Conduct is based on the Zehnder Group Code of Conduct as well as external standards such as the UN Universal Declaration of Human Rights, the International Labour Organization (ILO) and the principles of the UNGC. We also systematically train our own employees in this regard to raise their awareness of fair business practices, ensuring that our values are embedded in our day-to-day business practices and along our value chain. We audit suppliers related to a risk assessment – and new direct material suppliers if necessary – before doing business with them. Moreover, we expand our auditing processes to include social and environmental aspects. This way we ensure that the suppliers' commitments are effectively applied.

We do not use financial pressure to implement the Supplier Code of Conduct but focus on cooperation and dialogue with our suppliers. If a supplier hesitates to sign, we seek to find a solution that satisfies both parties' needs. We want to ensure that our suppliers live up to our Supplier Code of Conduct, be it acting on their own initiative or by implementing ours. We communicate with them directly, which allows for a more efficient process of improvement.

To optimise our resource allocation and focus on the suppliers with the highest potential risk, we conduct a high-level risk screening. This screening involves using various publicly available indices from third parties. Countries assessed receive a risk score, which allows us to pay extra attention to the risks inherent to them. As an additional step, our internal assessment assigns risk scores to purchasing categories. Suppliers scoring highly in both assessments are prioritised and receive more resources. In those cases, we implement additional measures to investigate and validate the identified potential risks thoroughly. In addition, we constantly work on integrating sustainability topics into our existing tools for risk assessment and audits to ensure the commitment goes beyond signing the Supplier Code of Conduct.

The next step for us is to verify that our suppliers actively comply with and implement the Supplier Code of Conduct. Our suppliers are key to us reaching our targets for sustainable procurement and we are convinced that trust and partnership provide the best conditions for change. That is why we focus on assisting their development towards better environmental stewardship, fair labour practices and strong and transparent governance.

Supply chain transparency is set to be a game changer in how we manage and collaborate with our suppliers. Close collaboration with our strategic supply partners, based on trust and mutual sustainability targets, will bring us one significant step closer to our tier 2 suppliers.

The responsibility for reaching our sustainable purchasing targets lies with Group and local Procurement. The procurement team is represented by the CFO

and COOs in the Sustainability Steering Committee. It manages and coordinates the implementation of measures across the Group, aggregates and analyses the respective KPIs and regularly reports to the Sustainability Steering Committee. Due diligence processes include supplier risk assessments, a defined onboarding process that includes ESG criteria and audits of high-risk suppliers as well as other tools to manage suppliers such as supplier relationship management tools, sustainability platforms, etc.

¹ Available at www.zehndergroup.com/en/common/supplier-code-of-conduct

Implementation and outlook

To implement the above management approach and policies, we defined an ambition which is underpinned by five targets and monitored via specific KPIs.

Ambition: Ensure suppliers apply the same sustainability ambitions as we do and are transparent about their environmental and social impacts along the value chain

Set up a Zehnder supply chain due diligence and risk management standard operating procedure

Status:

As a decentralised organisation, we require unambiguous processes that all our sites and partners can follow. In 2023, we updated the risk screening and the processes of our procurement handbook.

Outlook:

Within the next two years, we aim to implement the defined supply chain due diligence and risk management standard operating procedure. We also want to implement the “Ethical Trading Initiative – Guide to buying responsibly” for sustainable purchasing.

Signed Supplier Code of Conduct by significant direct suppliers

Status:

In 2023, 406 suppliers signed the Supplier Code of Conduct.

Outlook:

All medium- and high-risk direct material and logistics suppliers are to sign our Supplier Code of Conduct or adhere to a similar standard by 2025.

On-site audit of high-risk suppliers

Status:

Based on an individual assessment, our high-risk suppliers are subject to sustainability audits. Using our audit template, which includes ESG topics, we can assess if our suppliers fulfil our Supplier Code of Conduct. Depending on the results, suppliers are recommended improvement measures and are expected to implement them within a reasonable time frame. In 2023, we identified 34 high-risk suppliers through our risk screening, of whom 22 have been audited.

Outlook:

Our target is to conduct on-site audits of 25 medium- and high-risk suppliers over the years 2024 and 2025.

Build capacity for sustainability knowledge

Status:

Internal capacity building is an essential part of our strategy. To ensure that all members of our procurement team are well-versed in sustainability topics, we conduct internal training regarding material topics.

Outlook:

We will continue to focus on capacity building, utilising both external and internal resources. In 2024, we aim to provide at least one full day of training on

audits based on the material topics of Zehnder Group for our Group Procurement, while local training will take place following a “train the trainer” approach.

Onboard Supplier Ethical Data Exchange platform of high-risk suppliers

Status:

In November 2023, we started the onboarding of our high-risk suppliers onto the Supplier Ethical Data Exchange (SEDEX) risk assessment platform. Only a few suppliers have onboarded so far.

Outlook:

We expect the number of high-risk suppliers joining the SEDEX platform to increase in the coming months. Our target is to onboard 80% of our high-risk suppliers by the end of 2025 onto SEDEX or another similar platform.

GRI 204: Procurement Practices 2016

Disclosure 204-1 Proportion of spending on local suppliers

Indicator description	Unit of measure	2023	2022	Change from prior year
Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation	%	54.0	52.0	2.0pp

Significant unit of operations is defined as business units representing above 5% of total spend. Local here is defined as by country.

In the Sustainability Report 2022 we reported 75.8%, however, this did not include two major business units due to lack of data. The restated 2022 figure is shown in this table, applying the scope from 2023 to 2022 spend.

2023 data relies in part on spend and market forecasts.

GRI 308: Supplier Environmental Assessment 2016

Disclosure 308-1 New suppliers that were screened using environmental criteria

Indicator description	Unit of measure	2023	2022	Change from prior year
Percentage of new suppliers that were screened using environmental criteria	%	–	n/a	n/a

GRI 308: Supplier Environmental Assessment 2016**Disclosure 308-2 Negative environmental impacts in the supply chain and actions taken**

Indicator description	Unit of measure	2023	2022	Change from prior year
Number of suppliers assessed for environmental impacts	#	24	n/a	n/a
Number of suppliers identified as having significant actual and potential negative environmental impacts	#	–	n/a	n/a
Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment	%	–	n/a	n/a
Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment	%	–	n/a	n/a

GRI 414: Supplier Social Assessment 2016**Disclosure 414-1 New suppliers that were screened using social criteria**

Indicator description	Unit of measure	2023	2022	Change from prior year
Percentage of new suppliers that were screened using social criteria	%	–	n/a	n/a

GRI 414: Supplier Social Assessment 2016**Disclosure 414-2 Negative social impacts in the supply chain and actions taken**

Indicator description	Unit of measure	2023	2022	Change from prior year
Number of suppliers assessed for social impact	#	24	n/a	n/a
Number of suppliers identified as having significant actual and potential negative social impacts	#	–	n/a	n/a
Percentage of suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment	%	–	n/a	n/a
Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment	%	–	n/a	n/a

Suppliers that have signed the Supplier Code of Conduct

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of direct material suppliers that have signed the Supplier Code of Conduct	%	29.1	n/a	n/a
Rate of indirect material suppliers that have signed the Supplier Code of Conduct	%	–	n/a	n/a

High-risk suppliers onboarded on SEDEX

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of high-risk suppliers onboarded on SEDEX	%	6	n/a	n/a

Only suppliers to European locations on SAP are considered.

A high-risk supplier is defined as a supplier that has a high risk score based on the three characteristics country risk (coface index), health and safety category risk and a surface coating risk (galvanised or chrome plated).

In total, 34 high-risk suppliers were identified.

Combating corruption: Introduction

Upholding fairness and transparency in business

As clearly stated in our Code of Conduct, our business is based on the quality of our products and services and not on corrupt practices. We do not tolerate any form of bribery or corruption. Thanks to our “Combating corruption” efforts, we are addressing the material issue “Corruption & whistleblower protection” which has been identified in our **double materiality assessment**.

At the beginning of 2023, our CEO together with our Group Legal Counsel shared a video message addressed to all employees in which the paramount importance of our Code of Conduct was reiterated and the revision of the Code of Conduct and the updates contained were further explained.

Underlining our commitment to prevent all forms of bribery or corruption, our CEO has endorsed the Call-to-Action from business to governments. This initiative encourages collaboration in reinforcing governance and anti-corruption efforts and was launched by the UNGC. The Call-to-Action urges governments to highlight anti-corruption and good governance as fundamental pillars of a sustainable and inclusive global economy and embrace them as important principles of the 2030 Agenda for Sustainable Development.

Impacts, risks and opportunities

Impacts

Corruption indirectly weakens the accountability and government structures that are supposed to protect human rights. Corruption and bribery can also directly impact human rights by bypassing the laws and tax systems intended to enforce and reinforce them through public education and other measures. By setting a positive example with a good corporate culture and by requiring our suppliers to do the same, we can have a positive impact beyond our own company to boost transparency in the whole supply chain.

Risks and opportunities

While corruption is a risk in all industries, it is generally perceived to be especially pronounced in the construction sector¹ that we supply. Zehnder Group is headquartered in Switzerland and has a significant presence in the Netherlands and Germany. All these countries are within the top ten of the Corruption Perceptions Index², indicating low levels of public sector corruption. At the same time, we also face location-specific risks, with some of our sites based in countries, such as China (rank 65/180) or Turkey (rank 101/180), that score somewhat poorly on the Corruption Perceptions Index. Corruption harms an entire industry, not just an individual company. This can result in a scenario where resources are not allocated economically, meaning that the optimal market solution may not prevail. This situation can negatively impact long-term innovation and the overall well-being of society. In essence, a potential bribery or corruption case could lead to significant legal and reputational repercussions. Therefore, we are firmly focused on investing in transparency and prevention measures as part of our compliance.

As stated in our Code of Conduct, we want to win over customers on the margins by convincing them with our product portfolios – and not with corrupt

practices. With this attitude, we ensure long-time success through continuous innovation and improvements. There is also a great social opportunity to combat corruption as it is vital for the empowerment, participation and protection of people that belong to marginalised and vulnerable groups.

¹ Source: PWC, 2014. [Engineering and construction sector analysis of PwC's 2014 Global Economic Crime Survey](#)

² The [Corruption Perception Index](#) has been published by Transparency International since 1995. It is an index which ranks countries by their perceived levels of public sector corruption, as determined by expert assessments and opinion surveys.

Compliance and fair business practices

A framework for ethical conduct and anti-corruption measures

Management approach

Zehnder Group's Code of Conduct¹ is an integral part of our culture and serves as a guideline for ethically, socially and legally responsible behaviour. It is a core element in our day-to-day interactions with our colleagues, customers, suppliers and partners. It helps us to act responsibly and guides our vision. Together with Zehnder's values, it serves as the cornerstone of our compliance activities. The Code of Conduct and the company values are available in ten languages and their contents have been communicated and made accessible to employees throughout Zehnder Group. They represent the foundational values of Zehnder's corporate culture.

The Code of Conduct covers the following key topics:

- Integrity, ethics and compliance
- Conflicts of interest and insider trading
- Safeguarding corporate assets
- Communication
- Environment, health and safety
- Fairness, respect and anti-discrimination
- Diversity, equity and inclusion
- Confidentiality and data privacy
- Competition and global trade
- Corruption and gifts
- Quality

The Code of Conduct is updated whenever there is agreement that a revision is essential. The most recent revision in 2022 involved extensive collaboration with stakeholders, including the Board of Directors, the Group Executive Committee and various Group functions. The Code of Conduct makes reference to significant soft law documents, including the UN Guiding Principles for Business and Human Rights, Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises and OECD Due Diligence Guidance for Responsible Business Conduct.

The Group further has a Legal and Compliance Directive that defines responsibilities, duties and processes and ensures they are monitored.

The compliance system consists of a variety of elements such as directives, guidelines, regular in-person training, e-learning, onboarding of new employees, newsletters, integration into internal audits, internal reporting on legal and compliance issues as well as a Zehnder Group Integrity Line for employees, external partners and other stakeholders.

Should an incident occur within the Group, there is an obligation to report it. To this end, each Zehnder company has appointed a contact person who is responsible for incidents involving Legal and Compliance. At least once a

quarter, the individuals responsible for the areas referred to report or convene to share information across the entire Group.

If employees observe any irregularities or violations and do not wish to report them to their supervisors, their local HR contact, the Group Legal Counsel, the Head of Group Internal Audit & Compliance, the Director Group Human Resources or a Group Executive Committee member, they can report this potential misconduct via our online **Integrity Line**. The Integrity Line is accessible publicly in every country in which we operate. This channel allows all stakeholders to report incidents anonymously in the local language. All concerns regarding compliance with the Code of Conduct will be investigated with appropriate actions taken if necessary. Zehnder is committed to discretion, ensuring that informants remain anonymous and that information is kept confidential to the greatest extent possible. Any employee who, in good faith, reports any potential misconduct, provides information or assists in any other way with a review or investigation of potential misconduct will be protected from any retaliation in accordance with our Group Whistleblowing Guidelines.

In 2023, eight whistleblowing cases were reported via the Integrity Line, compared to two cases in nine months over 2022². All eight cases were processed, two of them locally and six at Group level. According to our legal team's assessment, four of them were justified. One case was an external customer complaint, while seven were internal complaints of which five referred to harassment and inequality, one to quality and safety issues and one to confidentiality and data privacy. One case occurred in North America, six in Europe and one in China. In three cases a warning was issued while one case led to a termination of employment. In three cases, the investigation was discontinued as no wrongdoing could be established and one case is still pending. Compliance cases are reported to the Audit Committee. A compliance report detailing the frequency and category of whistleblowing cases is prepared by the Head of Group Internal Audit & Compliance for the Audit Committee on a yearly basis.

Regarding the management approach to combating bribery and corruption and to underscore the significance of this matter, Zehnder introduced an Anti-Bribery and Anti-Corruption Directive in 2023. This directive serves to offer supplementary guidance to the principles outlined in our Code of Conduct and specifies how they should be implemented. It further clarifies and defines the minimum standards with regards to giving and receiving gifts or other benefits as set out in relevant national and international anti-bribery and anti-corruption laws. The Anti-Bribery and Anti-Corruption Directive provides more details about the general principles, the processes, thresholds and sums that apply and in which case authorisation by the recipient's line manager, the Group Executive Committee or Group Compliance is required. The Chair of the Board of Directors and the Vice Chair of the Board of Directors assumed an active role in the proceedings to update the policy. We adhere to relevant laws, including the Swiss Criminal Code that prohibits the granting of advantages or bribery and similar regulations in other relevant jurisdictions. Additionally, we take into account the recommendations of various stakeholders and conduct benchmarking to align with international standards. The directive was approved by the Group Executive Committee and was disseminated in 2023. In our Code of Conduct as well as the new Anti-Bribery and Anti-Corruption Directive we have outlined the following general principles that apply in all our business dealings:

- Our business is based on the quality of our products and services and not on corrupt practices. We do not tolerate any form of bribery or corruption.
- We refrain from offering or giving anything of value to any private person, governmental official (including employees of state-owned enterprises) or organisation with a view to influencing the decision-making process and/or securing any business advantages. The same applies to receiving anything of value. This also applies to facilitation payments and indirectly, i.e., we do not use third parties (such as agents or sales representatives) for such corrupt practices or encourage them to act on our behalf.
- We recognise that bribes can take many forms and include practices such as providing cash, gifts, entertainment, hospitality, inappropriate discounts, kickbacks and/or hiring a family member or a friend with a view to seek influence and/or making donations.
- We keep appropriate and accurate records of all our business transactions (including books and accounts as well as the documents relating to the preparation of such records).
- We avoid giving unreasonable, excessive or lavish gifts to business partners and refuse unreasonable, excessive or lavish gifts from business partners. Small and appropriate gifts can only be offered as lawful tokens of normal business appreciations or social courtesy and when they are not intended to influence any party in line with our internal directives.

Our third-party partners are held to the same accountability standard as Zehnder employees as is reflected in the Supplier Code of Conduct (see [Sustainable purchasing](#)). The aim is that every business contract with an external party contains an ethics clause requiring them to read and accept the Zehnder Group Supplier Code of Conduct or equivalent principles. In addition, an anti-bribery and corruption clause is included in our framework supply agreements, reflecting the local laws and legislation, for example the US Foreign Corrupt Practices Act or the UK Bribery Act 2010.

In 2023, the Head of Group Internal Audit & Compliance was responsible for implementing compliance in close cooperation with Group Legal and other stakeholders, such as Group HR and Group Sustainability. Legal and Compliance cases are reported to the Group Executive Committee and the Audit Committee on a routine basis. Our compliance due diligence standard is structured in the classical three lines of defence. The first line of defence consists of our business, implementing the internal regulations in their daily operations. The second line comprises Legal and Compliance experts, who support, monitor and challenge on compliance related matters. The third line consists of our Head of Group Internal Audit & Compliance and our Audit Committee, who independently and objectively advise on all compliance matters. The Board of Directors and the Group Executive Committee, as the ultimate governing bodies, oversee all three lines of defence and provide accountability towards our stakeholders by providing transparency, integrity and leadership. Our due diligence processes further include regular legal and compliance reporting, upskilling, our internal control system, internal audits, our Group risk management process and our Whistleblowing Integrity Line.

¹ Available at www.zehndergroup.com/en/investor-relations/corporate-governance

² The Integrity Line was introduced in April 2022.

Implementation and outlook

To implement the above management approach and policies, we defined an ambition that is underpinned by several targets and monitored via specific KPIs.

Ambition: Maintain a good compliance framework, upskill and achieve zero corruption or antitrust incidents, with compliance reviews forming an essential part of internal audits

Upskill in compliance through compliance training

Status:

In compliance training, face-to-face physical sessions for selected employees remain crucial, as the tone set by leadership is key and is most effectively communicated in person. During the reporting year, in-person legal and compliance upskilling was conducted by the Head of Group Internal Audit & Compliance together with the Group Legal Counsel, including at the annual top management summer meeting, with local management in Switzerland and the UK or with Group Procurement.

In addition, the Group started a compliance e-learning programme. The dedicated training for employees, including management, generally comprises two e-learning modules per year, one in-depth module for specific groups and one broader one on the Code of Conduct for all employees. These modules are mandatory.

In 2023, we focused on rolling out the updated Code of Conduct and offering relevant training. As referred to above, the roll-out was accompanied by a Group video message of the CEO and the Group Legal Counsel explaining the update and underlining the importance of the Code of Conduct for our corporate culture and business. The internal audits showed that implementation was generally on track but varied depending on the country and site, with local management assuming responsibility. While some sites required their employees to sign an agreement regarding the Code of Conduct, others included it in an employee handbook given to all employees. If a site has not trained all employees in the matter, a follow-up is conducted. As a further roll-out measure, Zehnder developed an e-learning programme covering the entire Code of Conduct. The roll-out of the Code of Conduct e-learning programme will be in 2024.

The first in-depth e-learning module in 2023 revolved around upskilling in the areas of anti-bribery and anti-corruption. Some 900 out of approximately 1,000 selected employees completed the training by the cut-off date for this report. The focus group for the training was mainly employees of the purchasing and sales teams as well as all management levels and Group functions. The rollout has already led to an increased awareness among employees who requested more information from Group Compliance. The roll-out of the Anti-Bribery and Anti-Corruption Directive was supported by a remote training course on the content of the directive with training cases. The target audience comprised around 80 managers and Group function heads. The feedback on the training was overwhelmingly positive with an average rating of 4.5/5.

Outlook:

In 2024, we will continue the compliance training campaign and conduct internal audits to perform spot checks. The e-learning focus topic chosen for selected employees for 2024 is antitrust and the Code of Conduct module will be rolled out for the benefit of all employees.

Establish a more granular risk management framework related to operations with a potentially higher risk score for bribery or corruption

Status:

As outlined above, we trained selected employees regarding bribery and corruption risk during the reporting period. The selection of the employees for the training took into account the roles (with a focus on gatekeeper functions as well as customer- and supplier-facing roles) and locations of the employees.

Outlook:

Establishment of an even more granular risk management framework related to operations with a potentially higher risk score for bribery or corruption. Our focus for 2024 is to develop a more granular framework for the assessment of corruption risk for all our sites. We will develop a catalogue of criteria for identifying overall risk exposure based on e.g. geographic location, revenue,

budget responsibility, headcount and previously reported cases at the location in question.

The tracking of this measure will be conducted through the means of our general compliance management approach (including training, internal audit checks and reporting possibilities for potential breaches).

Focus on raising awareness for antitrust

Status:

Antitrust was a key compliance topic at the annual top management summer meeting in 2022. The compliance focus topic of 2023 was anti-bribery and anti-corruption.

Outlook:

Antitrust and competition law will be a focus topic for 2024. Selected employees will be trained on this focus topic to raise their awareness of the issue. This measure will again be monitored by means of our general compliance management approach.

GRI 205: Anti-corruption 2016

Disclosure 205-2 Communication and training about anti-corruption policies and procedures

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of governance body members to whom the organisation's anti-corruption policies and procedures have been communicated	#	12	n/a	n/a
Total percentage of governance body members to whom the organisation's anti-corruption policies and procedures have been communicated	%	100.0	n/a	n/a
Total number of governance body members that have received training on anti-corruption	#	7	n/a	n/a
Total percentage of governance body members that have received training on anti-corruption	%	58.3	n/a	n/a

The definition of governance body members includes all members of the Board of Directors and the Group Executive Committee.

GRI 205: Anti-corruption 2016**Disclosure 205-3 Confirmed incidents of corruption and actions taken**

Indicator description	Unit of measure	2023	2022	Change from prior year
Total number of confirmed incidents of corruption	#	–	n/a	n/a
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	#	–	n/a	n/a
Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	#	–	n/a	n/a
Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases	#	–	n/a	n/a

GRI 206: Anti-competitive Behaviour 2016**Disclosure 206-1 Legal actions for anti-competitive behaviour, anti-trust and monopoly practices**

Indicator description	Unit of measure	2023	2022	Change from prior year
Number of legal actions pending or completed during the reporting period regarding anti-competitive behaviour and violations of antitrust and monopoly legislation in which the organisation has been identified as a participant	#	–	n/a	n/a

Employees to whom the Code of Conduct was communicated

Indicator description	Unit of measure	2023	2022	Change from prior year
Rate of employees to whom the Code of Conduct was communicated	%	92.0	n/a	n/a

The Code of Conduct is available centrally on the Zehnder Group intranet. In addition, the roll-out of the revised version was conducted by the Group to local management and Group function heads with the instruction to further disseminate it locally as appropriate to all employees.

Respect for human rights: Introduction

Due diligence and sustainable practices

It is key to our corporate social responsibility to mitigate negative impacts on people and the environment stemming from our company or entities within our value chain. In our initiatives under **Respect for human rights** we specifically address the material issues “Economic, social & cultural rights”, “Forced labour”, “Collective bargaining & association” and “Social inclusion & responsible marketing” which have been identified in our **double materiality assessment**. As human rights are relevant to many of our activities, several of our material topics also contain measures to ensure respect for human rights, such as **Sustainable purchasing**, **Occupational health and safety**, **Diversity, equal opportunity, inclusion and decent work** and **Combating corruption**.

We are dedicated to upholding human rights through a proactive Human Rights Due Diligence (HRDD) approach. We are implementing policies, such as the **Human Rights Directive**, to address key topics like child labour and minerals from conflict areas. Our ongoing efforts include stakeholder engagement, risk assessments and targeted measures. We aim for transparency, regularly evaluating our HRDD approach and reporting results. Additionally, we are focused on ending the sourcing of steel from conflict-affected areas by 2025.

Impacts, risks and opportunities

Impacts

As a global company, we operate in diverse environments and face various challenges that can impact human rights, particularly in our supply chain. Salient human rights topics are those that are particularly noteworthy because they have the highest risk of severe negative impact through a company’s activities or business relationships. The determination of saliency considers both the severity of the topic and its likelihood. Based on our most recent risk assessment, the salient human rights topics for Zehnder Group presenting potential negative impacts are child labour, environmental issues impacting human rights (including climate change), freedom of association and collective bargaining, living wage/ income, modern slavery and forced labour (including migrant workers), occupational health and safety, working conditions (including working hours) as well as workplace discrimination and harassment. However, our products contribute to the promotion of human rights, particularly in ensuring the right to clean air and health. Our products help provide clean air, improving the health of our customers in the process, but due to the high price point at which our products are usually set, these benefits are not available to all who need them, particularly those with lower incomes and who are outside the Global North.

Risks and opportunities

Neglecting the promotion of human rights within our operations and supply chain could lead to operational challenges and ethical criticism, including reputational damage, legal and regulatory risks, supply chain disruptions, worker unrest and potential boycotts from consumers. Likewise, the promotion of human rights within our operations and supply chains both benefit our reputation and improve the reliability of our supply chain. Exploring the development of simplified and more affordable products can expand our market, and increase the availability of our products’ benefits to lower-income customers.

It is an opportunity for Zehnder to impact human rights positively by implementing a strong human rights approach and by collaborating with our suppliers.

Respect for human rights

Ensuring ethical governance

Management approach

Respect for human rights is reflected in our Code of Conduct, our Supplier Code of Conduct, our Human Rights Directive published in 2024 and our Whistleblowing Guideline.

Embracing an HRDD approach, Zehnder Group started recently developing a management system to conscientiously assess our human rights risks and impacts in a proactive manner. During this process, existing attributes will be reviewed based on a risk-based approach which includes a review of our compliance practices and a HRDD as well as a supplier sustainability risk assessment. We adhere to the principles of the ILO Conventions Nos 138 and 182, the ILO-IOE (International Labour Organization and International Organisation of Employers) Child Labour Guidance Tool for Business of 15 December 2015 with respect to fundamental labour rights and the UN Guiding Principles (UNGPs) on Business and Human Rights.

We put processes and policies in place for each of the six HRDD core elements: “Policy commitment”, “Risk & impact assessment”, “Risk-based measures”, “Embedding”, “Track & communicate” and “Grievance & remedy” and defined measures to improve in all six areas. The measures are regularly evaluated for their effectiveness. The human rights topics analysed are child labour, environmental issues impacting human rights, freedom of association and collective bargaining, living wage/income, modern slavery and forced labour, OHS, working conditions as well as workplace discrimination and harassment.

An external human rights consultancy supported us in building internal capacity and conducting a gap analysis. Based on interviews with 24 stakeholders, we analysed how internal policies and processes need to be adapted to comply with international standards on the core HRDD elements. The analysis showed that Zehnder already has individual HRDD elements in various directives, processes and systems. However, we did not yet have a holistic and systematic approach to implementing HRDD and certain elements needed to be further developed to comply with the UNGP and need to reach beyond tier 1 suppliers.

For each of the six HRDD core elements, Zehnder's status was analysed and goals and respective measures were defined:

- **Policy commitment:** As a basis for integrating human rights in a company, a publicly available policy commitment raises awareness among stakeholders. It contains key principles, processes and measures. While Zehnder's commitment to human rights had already been integrated in the Code of Conduct, the Supplier Code of Conduct and the Modern Slavery Statement, the commitment needed to be developed further. Therefore, Zehnder drafted a standalone Human Rights Directive in 2023, including a description of the HRDD management system, which has been publicly available since 2024. This directive represents Zehnder's commitment to support and respect human rights and guides the implementation of the Human Rights framework for Zehnder. It is approved by the Group Executive Committee.

- **Risk & impact assessment:** Systematically analysing human rights risks and impacts is the basis to take appropriate measures. In the initial phase of developing a human rights risk management framework, we conducted an assessment and prioritisation of salient human rights topics across our value chain. This prioritisation was based on the severity and likelihood of each topic. Most of the salient risks identified are concentrated along our value chain, encompassing the supply chain, end-of-life treatment and logistics. These risks include topics such as modern slavery, forced labour, child labour, environmental impacts on human rights, living wage or income and freedom of association and collective bargaining. However, all these topics are of medium salience in our own operations. The most prominent risk within our operations is associated with OHS. Wherever possible and meaningful, in-depth assessments are conducted to gather more information and engage with potentially affected stakeholders on salient human rights topics.
- **Risk-based measures:** Following the risk assessment, effective measures need to be defined and implemented to prevent potential risks or actual negative impacts on affected stakeholders. Zehnder has defined the following measures as focus topics for 2024 and 2025:

Workplace discrimination and harassment in own operations: Ensure Group-wide implementation of Diversity, Equity and Inclusion Directive and Anti-Harassment Directive (trainings, grievances, monitoring, etc.).

Living wage in own operations: Identify context/root cause of the identified income gaps and create a roadmap (targets, timelines and responsibilities) to address these gaps.

Modern slavery and forced labour risks in own operations: Conduct a Group-wide risk assessment to identify and address human rights risks for workers (including those that are sub-contracted) in Zehnder's own operations and to commit to the employer pays principle to ensure that no recruitment fees are charged to migrant workers.

Occupational health & safety in own operations: Develop a directive containing the Zehnder OHS management system which is obligatory for all entities (including OHS requirements such as ISO 45001, trainings, monitoring of OHS cases, etc.)

Transportation & logistics supplier risk assessment: Conduct a high-level human rights risk assessment for the transport/logistics value chain stage which includes all risks (including child labour).

- **Embedding:** HRDD needs to be integrated in the company for credibility and continuous improvement. At Zehnder, responsibility is assigned to the Steering Committee, the CEO and the Chair of the Board of Directors. The next steps include developing a human rights training concept as well as responsible purchasing principles. Furthermore, human rights aspects need to be embedded deeper into Zehnder's strategies, policies and processes across all departments, including, but not limited to, Group risk assessment, internal audit and contracts with suppliers, customers and business partners.
- **Track & communicate:** Zehnder routinely tracks and evaluates the performance of the HRDD approach including the grievance mechanism. With this report, Zehnder is communicating its human rights targets for the first time. From 2024 onwards, we will regularly assess our HRDD approach and report results in the Sustainability Reports that are publicly accessible on our website.

- **Grievance & remedy:** At Zehnder Group we maintain the highest ethical standards and believe in transparency and trust. Zehnder already has a publicly available Integrity Line for employees and stakeholders to report violations of regulations, laws and company guidelines (see **Combating corruption**). For 2024 and 2025, Zehnder will increase access to and support for its grievance mechanisms.

Next to the HRDD, Zehnder has several guidelines in place that already integrate human rights topics, such as the Anti-Harassment Directive and the Diversity and Equity and Inclusion Directive. Local OHS policies together with our management approach ensure a safe and healthy working environment for our employees. Regarding our value chain, the key guidelines are our Zehnder Group Code of Conduct, the Supplier Code of Conduct and our **Modern Slavery Statement**¹. Another point worth mentioning is that the employees in most of our main sites are covered by collective bargaining agreements. However, we are not yet able to provide a company-wide figure on how many of our employees globally are covered by collective bargaining agreements, but we are confident that we will be able to report this figure next year.

In compliance with Swiss regulations regarding due diligence obligations and transparency concerning minerals and metals from conflict areas, as well as child labour, Zehnder addresses the topics of child labour and minerals from conflict areas within the broader context of its HRDD.

With respect to child labour, as explained above we are therefore following international standards and therefore comply with the equivalent provided by Swiss law².

When sourced from a conflict-affected or high-risk context, all minerals and metals have the potential to cause or contribute to conflict financing and severe human rights abuses. Regarding minerals and metals from conflict areas, Zehnder Group has conducted an assessment of the minerals in scope in accordance with the Ordinance on Due Diligence Obligations and Transparency Regarding Minerals and Metals from Conflict Areas³. Assessing the import volumes from relevant business units in Europe⁴ showed that our total imports are below the threshold values in accordance with the Ordinance on Due Diligence Obligations and Transparency Regarding Minerals and Metals from Conflict Areas and Child Labour. Nevertheless, we aim to continue to reduce the use of conflict minerals in our products and, wherever possible, ensure that we do not use materials sourced from areas potentially affected by conflict.

Group Sustainability leads the HRDD at Zehnder and coordinates with the Group Executive Committee as well as relevant departments such as Legal, HR, Procurement, Logistics and the Competence Centres. Due diligence is applied through the six elements which form part of the HRDD approach set out above.

¹ Limited to Zehnder Group UK

² As defined in CO Art. 964j Para 4 and Ordinance on Due Diligence Obligations and Transparency Regarding Minerals and Metals from Conflict Areas and Child Labour Art. 9 Para 1

³ Tantalum, tin, tungsten, gold (3TG), as defined by regulation (EU) 2017/821

⁴ Lahr (DE), Bolesławiec (PL), Gränichen (CH), Vaux-Andigny (FR) and Manisa (TR)

Implementation and outlook

To implement the above management approach and policies, we defined an ambition that is underpinned by several targets and monitored via specific KPIs.

Ambition: Apply a Human Rights Due Diligence approach and respect the UN Guiding Principles on Human Rights

Set up Human Rights Due Diligence risk management process and implement a roadmap based on the UN Guiding Principles on Business and Human Rights **Status:**

In 2023, we initiated the implementation of an HRDD process in accordance with international standards. Zehnder has developed a Human Rights Roadmap – a key tool when it comes to encapsulating all aspects of HRDD mentioned earlier. It will include quantitative as well as qualitative targets with clearly defined KPIs, measures, responsibilities, budget and resources, timelines and monitoring.

Outlook:

We continue to develop and implement the HRDD process and further develop the risk-based measures to tackle the salient human rights topics identified. This includes the development of relevant KPIs and setup of a systematic human rights risk management framework including a routine risk assessment.

Ambition: Minimise the use of rare earth and conflict minerals consumption in our products and production processes

Assess our main direct high risk material supply chains by country of origin **Status:**

Many materials have been well researched and documented for the human rights risks that are related to their production. In addition to tantalum, tin, tungsten and gold, we acknowledge the potential adverse effects of other materials procured by our Group for goods production. These include iron for steel, bauxite for aluminium, copper and the mica group of minerals.

Outlook:

Primarily, our initial focus is on the steel industry. Our aim is to identify the sources of iron used in the manufacturing of our steel products. We have set ourselves the goal of discontinuing the sourcing of steel from conflict-affected and high-risk areas by 2025 in cases where such sourcing exists at present.

GRI index

Zehnder Group has reported the information cited in this GRI content index for the period 1 January 2023 to 31 December 2023 with reference to the GRI Standards, including the requirements specified by GRI 1: Foundation 2021.

GRI content index

GRI STANDARD	DISCLOSURE	LOCATION
The organisation and its reporting practices		
GRI 2: General Disclosures 2021	2-1 Organisational details	Annual Report 2023 Sustainability Report 2023, Organisational purpose
	2-2 Entities included in the organisation's sustainability reporting	Annual Report 2023, Overview of companies Sustainability Report 2023, Our approach to reporting
	2-3 Reporting period, frequency and contact point	Sustainability Report 2023, Our approach to reporting
	2-4 Restatements of information	Sustainability Report 2023, Our approach to reporting
	2-5 External assurance	Sustainability Report 2023, Limited assurance
Activities and workers		
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	Annual Report 2023 Sustainability Report 2023, Organisational purpose
	2-7 Employees	Annual Report 2023 Sustainability Report 2023, Employee related issues
	2-8 Workers who are not employees	Sustainability Report 2023, Employee related issues
Governance		
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	Annual Report 2023, Corporate Governance
		Zehnder Group Homepage, Board of Directors
		Organisational regulations of Zehnder Group AG
		Sustainability Report 2023, Organisational structure

	2-10 Nomination and selection of the highest governance body	Annual Report 2023, Corporate Governance Articles of Association Organisational regulations of Zehnder Group AG
	2-11 Chair of the highest governance body	Articles of Association Organisational regulations of Zehnder Group AG
	2-12 Role of the highest governance body in overseeing the management of impacts	Annual Report 2023, Corporate Governance
	2-13 Delegation of responsibility for managing impacts	Sustainability Report 2023, Organisational structure Annual Report 2023, Corporate Governance
	2-14 Role of the highest governance body in sustainability reporting	Sustainability Report 2023, Organisational structure
	2-15 Conflicts of interest	Sustainability Report 2023, Compliance and fair business practices
	2-16 Communication of critical concerns	Code of Conduct Sustainability Report 2023, Compliance and fair business practices
	2-17 Collective knowledge of the highest governance body	Annual Report 2023, Corporate Governance Sustainability Report 2023, Organisational structure
	2-18 Evaluation of the performance of the highest governance body	Annual Report 2023, Corporate Governance Sustainability Report 2023, Organisational structure
	2-19 Remuneration policies	Annual Report 2023, Compensation Report
	2-20 Process to determine remuneration	Annual Report 2023, Compensation Report Annual Report 2023, Corporate Governance
	2-21 Annual total compensation ratio	Sustainability Report 2023, Diversity, equal opportunity, inclusion and decent work
Strategy, policies and practices		
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	Zehnder Group Sustainability Homepage Sustainability Report 2023, Introduction

2-23 Policy commitments	Code of Conduct
	Supplier Code of Conduct
	Zehnder Group Sustainability Homepage
	Sustainability Report 2023, Our approach to sustainability
	Sustainability Report 2023, Environmental matters
	Sustainability Report 2023, Employee related issues
	Sustainability Report 2023, Social issues
	Sustainability Report 2023, Combating corruption
	Sustainability Report 2023, Respect for human rights
2-24 Embedding policy commitments	Sustainability Report 2023, Environmental matters
	Sustainability Report 2023, Employee related issues
	Sustainability Report 2023, Social issues
	Sustainability Report 2023, Combating corruption
	Sustainability Report 2023, Respect for human rights
2-25 Processes to remediate negative impacts	Sustainability Report 2023, Environmental matters
	Sustainability Report 2023, Employee related issues
	Sustainability Report 2023, Social issues
	Sustainability Report 2023, Combating corruption
	Sustainability Report 2023, Respect for human rights
2-26 Mechanisms for seeking advice and raising concerns	Annual Report 2023, Corporate Governance
	Code of Conduct
	Sustainability Report 2023, Combating corruption
2-28 Membership associations	Zehnder Group Homepage

Stakeholder engagement

GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	Sustainability Report 2023, Communication with stakeholder groups
	2-30 Collective bargaining agreements	Sustainability Report 2023, Respect for human rights

Materiality assessment and list of material topics

GRI 3: Material Topics 2021	3-1 Process to determine material topics	Sustainability Report 2023, Materiality analysis
	3-2 List of material topics	Sustainability Report 2023, Materiality analysis

Circular products and innovation

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Environmental matters
		Sustainability Report 2023, Circular products and innovation
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Sustainability Report 2023, Circular products and innovation
	301-2 Recycled input materials used	Sustainability Report 2023, Circular products and innovation
	301-3 Reclaimed products and their packaging materials	Sustainability Report 2023, Circular products and innovation

Climate action

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Environmental matters
		Sustainability Report 2023, Climate action
GRI 302: Energy 2016	302-1 Energy consumption within the organisation	Sustainability Report 2023, Climate action
	302-2 Energy consumption outside the organisation	Sustainability Report 2023, Climate action
	302-3 Energy intensity	Sustainability Report 2023, Climate action
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Sustainability Report 2023, Climate action
	305-2 Energy indirect (Scope 2) GHG emissions	Sustainability Report 2023, Climate action
	305-3 Other indirect (Scope 3) GHG emissions	Sustainability Report 2023, Climate action
	305-4 GHG Emissions intensity	Sustainability Report 2023, Climate action

Resource-efficient production

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Environmental matters
		Sustainability Report 2023, Resource-efficient production
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Sustainability Report 2023, Environmental matters
	303-3 Water withdrawal	Sustainability Report 2023, Resource-efficient production
	303-4 Water discharge	Sustainability Report 2023, Resource-efficient production
	303-5 Water consumption	Sustainability Report 2023, Resource-efficient production
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	Sustainability Report 2023, Resource-efficient production
GRI 306: Waste 2020	306-1 Waste generation and significant waste related impacts	Sustainability Report 2023, Environmental matters
	306-2 Management of significant waste related impacts	Sustainability Report 2023, Resource-efficient production
	306-3 Waste generated	Sustainability Report 2023, Resource-efficient production
	306-4 Waste diverted from disposal	Sustainability Report 2023, Resource-efficient production
	306-5 Waste directed to disposal	Sustainability Report 2023, Resource-efficient production

Biodiversity

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Environmental matters
		Sustainability Report 2023, Biodiversity
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Sustainability Report 2023, Biodiversity

Occupational health and safety

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Employee related issues
		Sustainability Report 2023, Occupational health and safety
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Sustainability Report 2023, Occupational health and safety
	403-5 Worker training on occupational health and safety	Sustainability Report 2023, Occupational health and safety

403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

Sustainability Report 2023,
Occupational health and safety

403-8 Workers covered by an occupational health and safety management system

Sustainability Report 2023,
Occupational health and safety

403-9 Work-related injuries

Sustainability Report 2023,
Occupational health and safety

403-10 Work-related ill health

Sustainability Report 2023,
Occupational health and safety

Attractive employer

GRI 3: Material Topics 2021

3-3 Management of material topics

Sustainability Report 2023,
Employee related issues

Sustainability Report 2023,
Attractive employer

GRI 401: Employment 2016

401-1 New employee hires and employee turnover

Sustainability Report 2023,
Attractive employer

GRI 404: Training and Education 2016

404-1 Average hours of training per year per employee

Sustainability Report 2023,
Attractive employer

404-2 Programs for upgrading employee skills and transition assistance programs

Sustainability Report 2023,
Attractive employer

404-3 Percentage of employees receiving regular performance and career development reviews

Sustainability Report 2023,
Attractive employer

Diversity, equal opportunity, inclusion and decent work

GRI 3: Material Topics 2021

3-3 Management of material topics

Sustainability Report 2023,
Employee related issues

Sustainability Report 2023,
Diversity, equal opportunity,
inclusion and decent work

GRI 405: Diversity and Equal Opportunity 2016

405-1 Diversity of governance bodies and employees

Sustainability Report 2023,
Diversity, equal opportunity,
inclusion and decent work

GRI 406: Non-discrimination 2016

406-1 Incidents of discrimination and corrective actions taken

Sustainability Report 2023,
Diversity, equal opportunity,
inclusion and decent work

Sustainable purchasing

GRI 3: Material Topics 2021

3-3 Management of material topics

Sustainability Report 2023,
Social issues

Sustainability Report 2023,
Sustainable purchasing

GRI 204: Procurement Practices 2016

204-1 Proportion of spending on local suppliers

Sustainability Report 2023,
Sustainable purchasing

GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Sustainability Report 2023, Sustainable purchasing
	308-2 Negative environmental impacts in the supply chain and actions	Sustainability Report 2023, Sustainable purchasing
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Sustainability Report 2023, Sustainable purchasing
	308-2 Negative social impacts in the supply chain and actions	Sustainability Report 2023, Sustainable purchasing

Compliance and fair business practices

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Combating corruption
		Sustainability Report 2023, Compliance and fair business practices
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Sustainability Report 2023, Compliance and fair business practices
	205-2 Communication and training about anti-corruption policies and procedures	Sustainability Report 2023, Compliance and fair business practices
	205-3 Confirmed incidents of corruption and actions taken	Sustainability Report 2023, Compliance and fair business practices
GRI 206: Anti-competitive Behaviour 2016	206-1 Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	Sustainability Report 2023, Compliance and fair business practices

Respect for human rights

GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainability Report 2023, Respect for human rights
-----------------------------	-----------------------------------	--

Reconciliation table with the Swiss Code of Obligations

Transparency on non-financial matters

CO ARTICLE	DISCLOSURE	LOCATION
964b para. 1	Environmental matters (in particular CO ₂ goals)	Sustainability Report 2023, Environmental matters
964b para. 1	Social issues	Sustainability Report 2023, Social issues
964b para. 1	Employee-related issues	Sustainability Report 2023, Employee related issues
964b para. 1	Respect for human rights	Sustainability Report 2023, Respect for human rights
964b para. 1	Combating corruption	Sustainability Report 2023, Combating corruption
964b para. 1	Information required to understand the business performance	Annual Report 2023, Management Report
964b para. 1	Information required to understand the business result	Annual Report 2023, Financial Report
964b para. 1	Information required to understand the state of the undertaking and the effects of its activity on ...	... environmental matters (in particular CO ₂ goals)
		... social issues
		... employee related issues
		... respect for human rights
		... combating corruption
964b para. 2 ciph. 1	Description of the business model	Sustainability Report 2023, Organisational purpose
964b para. 2 ciph. 2	Description of the policies adopted including the due diligence applied in relation to ...	... environmental matters (in particular CO ₂ goals)
		Circular products and innovation: Management approach
		Climate action: Management approach
		Resource-efficient production: Management approach
		Biodiversity: Management approach
	... social issues	Sustainability Report 2023, Sustainable purchasing: Management approach

964b para. 2 ciph. 3	Presentation of the measures taken to implement these policies and an assessment of the effectiveness of these measures ...	... employee related issues	Sustainability Report 2023, Occupational health and safety: Management approach
			Sustainability Report 2023, Attractive employer: Management approach
			Sustainability Report 2023, Diversity, equal opportunity, inclusion and decent work: Management approach
		... respect for human rights	Sustainability Report 2023, Respect for human rights: Management approach
		... combating corruption	Sustainability Report 2023, Compliance and fair business practices: Management approach
		... environmental matters (in particular CO ₂ goals)	Sustainability Report 2023, Circular products and innovation: Implementation and outlook
			Sustainability Report 2023, Climate action: Implementation and outlook
			Sustainability Report 2023, Resource-efficient production: Implementation and outlook
			Sustainability Report 2023, Biodiversity: Implementation and outlook
		... social issues	Sustainability Report 2023, Sustainable purchasing: Implementation and outlook
		... employee related issues	Sustainability Report 2023, Occupational health and safety: Implementation and outlook
			Sustainability Report 2023, Attractive employer: Implementation and outlook
			Sustainability Report 2023, Diversity, equal opportunity, inclusion and decent work: Implementation and outlook
		... respect for human rights	Sustainability Report 2023, Respect for human rights: Implementation and outlook
		... combating corruption	Sustainability Report 2023, Compliance and fair business practices: Implementation and outlook

964b para. 2 ciph. 4	Description of the main risks that arise from our own business operations, related to ...	... environmental matters (in particular CO ₂ goals)	Sustainability Report 2023, Environmental matters: Risks and opportunities
		... social issues	Sustainability Report 2023, Social issues: Risks and opportunities
		... employee related issues	Sustainability Report 2023, Employee related issues: Risks and opportunities
		... respect for human rights	Sustainability Report 2023, Respect for human rights: Risks and opportunities
		... combating corruption	Sustainability Report 2023, Combating corruption: Risks and opportunities
964b para. 2 ciph. 4	Description of the main risks that arise from our business relationships, products or services related to ...	... environmental matters (in particular CO ₂ goals)	Sustainability Report 2023, Environmental matters: Risks and opportunities
		... social issues	Sustainability Report 2023, Social issues: Risks and opportunities
		... employee related issues	Sustainability Report 2023, Employee related issues: Risks and opportunities
		... respect for human rights	Sustainability Report 2023, Respect for human rights: Risks and opportunities
		... combating corruption	Sustainability Report 2023, Combating corruption: Risks and opportunities
964b para. 2 ciph. 5	Main performance indicators for our activities in relation to ...	... environmental matters (in particular CO ₂ goals)	Sustainability Report 2023, Circular products and innovation: Implementation and outlook
			Sustainability Report 2023, Climate action: Implementation and outlook
			Sustainability Report 2023, Resource-efficient production: Implementation and outlook
			Sustainability Report 2023, Biodiversity: Implementation and outlook
		... social issues	Sustainability Report 2023, Sustainable purchasing: Implementation and outlook
		... employee related issues	Sustainability Report 2023, Occupational health and safety: Implementation and outlook
			Sustainability Report 2023, Attractive employer: Implementation and outlook
			Sustainability Report 2023, Diversity, equal opportunity, inclusion and decent work: Implementation and outlook
		... respect for human rights	Sustainability Report 2023, Respect for human rights: Implementation and outlook

	... combating corruption	Sustainability Report 2023, Compliance and fair business practices: Implementation and outlook
964b para. 4	Scope of consolidation	Sustainability Report 2023, Our approach to reporting

List of abbreviations

CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
CO ₂ e	Carbon dioxide equivalent
DEFRA	Department for Environment, Food and Rural Affairs
EMEA	Europe, Middle East and Africa
ESG	Environmental, Social and Governance
ESRS	European Sustainability Reporting Standards
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GWP	Global Warming Potential
HR	Human Resources
HRDD	Human Rights Due Diligence
IEA	International Energy Agency
ILO	International Labour Organization
ILO-IOE	International Labour Organization and International Organisation of Employers
IPCC	Intergovernmental Panel on Climate Change
KPIs	Key performance indicators
LCA	Life cycle assessment
OECD	Organisation for Economic Co-operation and Development
OECMs	Other effective area-based conservation measures
OHS	Occupational health and safety
SBTi	Science Based Targets initiative
SDGs	Sustainable Development Goals
SEDEX	Supplier Ethical Data Exchange
TCFD	Task Force on Climate-related Financial Disclosures
UN	United Nations
UNGC	United Nations Global Compact
WWF	World Wide Fund for Nature

Independent practitioner's limited assurance report

Independent practitioner's limited assurance report

on 2023 selected indicators in the Sustainability Report 2023 to the
Board of Directors of Zehnder Group AG

Gränichen

We have been engaged by Board of Directors to perform assurance procedures to provide limited assurance on selected indicators in the Sustainability Report 2023 (including the GHG statement) of Zehnder Group AG for the period ended 31 December 2023. Our limited assurance engagement focused on 2023 selected indicators as presented in the Sustainability Report 2023 on pages 22 to 48 marked with the check mark ✓ PwC CH.

The following selected indicators were in our scope:

- Energy consumption on page 22
- Energy intensity on page 23
- Gross scope 1 GHG emissions on page 24
- Gross scope 2 GHG emissions on page 24
- Other indirect Scope 3 GHG emissions on page 25
- GHG emissions intensity on page 26
- Water withdrawal on pages 30 to 31
- Water discharge on pages 32 to 33
- Water consumption on page 33
- Waste generated and waste diverted from disposal on pages 35 to 39
- Occupational Health & Safety on pages 45 to 48

We do not comment on, nor conclude on any prospective information nor did we perform any assurance procedures on the information other than those stated above for the reporting period 2023.

The 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) were prepared by the Management of Zehnder Group AG (the 'Company') based on the guidelines for sustainability reporting of the Global Reporting Initiative, the "GRI Standards" (latest versions). The relevant GRI Standards for the selected indicators were disclosed under the respective pages as stated in the bullet points above. The Company presents its basis of reporting in the "Our approach to reporting" section in the 2023 Sustainability Report on page 6 and on the respective pages where the above-mentioned indicators were disclosed (the "suitable Criteria").

Inherent limitations

The accuracy and completeness of the 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) are subject to inherent limitations given their nature and methods for determining, calculating, and estimating such data. In addition, the quantification of the 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) is subject to inherent uncertainty because of incomplete scientific knowledge used to determine factors related to the 2023 selected indicators in the Sustainability Report 2023 and the values needed to combine e.g., emissions of different gases. Our assurance report will therefore have to be read in connection with the suitable Criteria used

PricewaterhouseCoopers AG, Birchstrasse 160, Postfach, 8050 Zürich, Switzerland
Telefon: +41 58 792 44 00, www.pwc.ch

PricewaterhouseCoopers AG is a member of the global PricewaterhouseCoopers network of firms, each of which is a separate and independent legal entity.

by Zehnder Group AG, its definitions, and procedures in the document "Our approach to reporting" and on the respective pages where the above-mentioned indicators were disclosed.

Management's responsibility

The Management of Zehnder Group AG is responsible for the preparation and presentation of the Sustainability Report 2023 (including the GHG statement) in accordance with the suitable Criteria. This responsibility includes the design, implementation and maintenance of the internal control system related to the preparation and presentation of the Sustainability Report 2023 (including the GHG statement) that are free from material misstatement, whether due to fraud or error. Furthermore, the Management is responsible for the selection and application of the suitable Criteria and adequate record keeping.

Independence and quality management

We are independent of the Zehnder Group AG in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

PricewaterhouseCoopers AG applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Practitioner's responsibility

Our responsibility is to perform an assurance limited engagement and to express a conclusion on the 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) marked with the check mark ✓ PwC CH. We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) 'Assurance engagements other than audits or reviews of historical financial information' and the International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410'), issued by the International Auditing and Assurance Standards Board. Those standards require that we plan and perform our procedures to obtain limited assurance whether anything has come to our attention that causes us to believe that the 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) marked with the check mark ✓ PwC CH was not, in all material aspects, in accordance with the suitable Criteria.

Based on risk and materiality considerations, we performed our procedures to obtain sufficient and appropriate assurance evidence. The procedures selected depend on the assurance practitioner's judgement. A limited assurance engagement under ISAE 3000 (Revised) ISAE 3410 is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.

We performed the procedures, among others:

- Assessing the suitability in the circumstances of the Company's use of the suitable Criteria, applied as explained in Basis of reporting in the "Our approach to reporting" on page 6 of the Sustainability Report 2023 and on the respective pages as described in the bullet points on the first page of this report;
- Inquiries and detailed walkthroughs with relevant stakeholders for the 2023 selected indicators in the 2023 Sustainability Report (including the GHG statement);
- Inspection of process and control descriptions and other internal guidelines and relevant documents;
- Analytical procedures;
- Reperformance of relevant calculations (including the GHG statement);
- Additional assurance procedures as deemed necessary (e.g. sample based source tracing)
- Local level procedures (site visits to inspect local processes and reconcile source evidence)



We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Conclusion

Based on the work we performed, nothing has come to our attention that causes us to believe that the 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) of Zehnder Group AG, marked with the check mark ✓ PwC CH, for the period ended 31 December 2023 are not prepared, in all material respects, in accordance with the suitable Criteria.

Intended users and purpose of the report

This report is prepared for, and only for, the Board of Directors of Zehnder Group AG, and solely for the purpose of reporting to them on 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement), marked with the check mark ✓ PwC CH, and no other purpose. We do not, in giving our conclusion, accept or assume responsibility (legal or otherwise) or accept liability for, or in connection with, any other purpose for which our report including the conclusion may be used, or to any other person to whom our report is shown or into whose hands it may come, and no other persons shall be entitled to rely on our conclusion.

We permit the disclosure of our report, in full only and in combination with the suitable Criteria, to enable the Management to demonstrate that they have discharged their governance responsibilities by commissioning an independent assurance report over the 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement), marked with the check mark ✓ PwC CH, without assuming or accepting any responsibility or liability to any third parties on our part. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Management of Zehnder Group AG for our work or this report.

PricewaterhouseCoopers AG

Stefan Räbsamen

Petar Lesic

"The maintenance and integrity of Zehnder Group AG's website and its content are the responsibility of the Management; the work carried out by the assurance provider does not involve consideration of the maintenance and integrity of the Zehnder Group AG's website, accordingly, the assurance providers accept no responsibility for any changes that may have occurred to the reported 2023 selected indicators in the Sustainability Report 2023 (including the GHG statement) or in the Basis of reporting in the "Our approach to reporting" section in the 2023 Sustainability Report on page 6 and on the respective pages where the tables have been disclosed as described on the first page of this report, since they were initially presented on the website.



Disclaimer

Disclaimer and cautionary statement

Certain statements in this document are forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives of Zehnder Group AG or Zehnder Group (the Group). The Group has based these forward-looking statements largely on current expectations, estimates and projections about the factors that may affect the Group's future performance, including global economic conditions as well as the economic conditions of the regions and the industries that are major markets for the Group. The words "believe," "may," "will," "estimate," "continue," "target," "anticipate," "intend," "expect," "plan" and similar words and the express or implied discussion of strategy, plans or intentions are intended to identify forward-looking statements. Forward-looking statements further include statements regarding the Group's targeted ESG targets and metrics, the mentioned KPIs, outlooks and measures as well as statements, sometimes incorporated by reference, regarding the Group's targeted profit, return on equity targets, expenses, pricing conditions, dividend policy, results, as well as statements regarding the Group's understanding of general environmental, social, governance, economic, financial and industry market conditions and expected developments. Undue reliance should not be placed on such statements because by their nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results and plans and objectives of Zehnder Group AG or the Group to differ materially from those expressed or implied in the forward-looking statements (or from past results). Factors such as (i) general economic conditions and competitive factors, particularly in key markets; (ii) the risk of a global economic downturn, in the construction industries in particular; (iii) performance of financial markets; (iv) levels of interest rates and currency exchange rates; (v) increased litigation activity and regulatory actions; (vi) costs associated with compliance activities; (vii) the timely development of new products, technologies and services that are useful for our customers; (viii) our ability to anticipate and react to technological change and evolving industry standards in the markets in which we operate; and (ix) changes in laws and regulations and in the policies of regulators may have a direct bearing on the results of operations of Zehnder Group AG and its Group and on whether the targets will be achieved. Although Zehnder Group AG believes that the expectations reflected in any such forward-looking statements are based on reasonable assumptions, we can give no assurance that they will be achieved. Zehnder Group AG undertakes no obligation to publicly update or revise any of these forward-looking statements, whether to reflect new information, future events or circumstances or otherwise. It should be noted that past performance or metrics are not a guide for future performance or metrics. Please also note that interim results are not necessarily indicative of full year results. Persons requiring advice should consult an independent adviser. This communication does not constitute an offer or an invitation for the sale or purchase of securities in any jurisdiction.

THIS COMMUNICATION DOES NOT CONTAIN AN OFFER OF SECURITIES FOR SALE IN THE UNITED STATES; SECURITIES MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES ABSENT OF REGISTRATION OR EXEMPTION FROM REGISTRATION AND ANY PUBLIC OFFERING OF SECURITIES TO BE MADE IN THE UNITED STATES MUST BE MADE BY MEANS OF A PROSPECTUS THAT MAY BE OBTAINED FROM THE ISSUER AND THAT WILL CONTAIN DETAILED INFORMATION ABOUT THE COMPANY AND MANAGEMENT, AS WELL AS FINANCIAL STATEMENTS.

Imprint

Publisher

Zehnder Group AG

Contact

Zehnder Group AG
Investor Relations
Moortalstrasse 1
5722 Graenichen (CH)

Phone +41 62 855 1521
investor-relations@zehndergroup.com
www.zehndergroup.com