

# Report on non-financial matters

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# Interview with Peter Spirig, V-ZUG CEO

## Mr Spirig, what are your thoughts looking back at V-ZUG's sustainability efforts in 2024?

In 2024, we made progress with the transformation at the Zug location. We have now transferred many of our production lines to the new "Zephyr Ost" production and assembly plant. As a result, we have an efficient and highly automated production location, which is truly a sight to behold. Furthermore, all new buildings have been connected to the Multi Energy Hub, which will further reduce our environmental footprint. Finally, we broke ground on the pilot plant for the production of hydrogen, which we are looking to use as a future substitute for natural gas in our high-temperature processes. Thanks to the investments we have made in recent years, we feel fit for the future. We are also continuously improving the energy efficiency of our products. Our new "Adora" line of dishwashers as well as the "CombiCooler V2000" refrigerators are good examples of this.

## The materiality matrix was revised in the reporting year. What does this mean for V-ZUG's sustainability strategy?

As part of the materiality process, we have honed our existing sustainability topics and identified new material topics. The financial perspective of the materiality analysis has helped us better understand and integrate strategic risks and opportunities into our strategy. These are closely linked to our business model and long-term corporate success. However, our strategic direction remains unchanged.

## What role does innovation play in sustainability?

The circular economy is a key element of our sustainability strategy and introduces a wide range of opportunities for innovation. Thanks to our efforts, we can reduce the material intensity of our products and give our customers the chance to consume less energy and resources, thus benefiting the environment. We also take advantage of the opportunities offered by digitalisation. By connecting the appliances, we can transparently inform our customers about the environmental impact of appliance use and provide tips for environmentally friendly use. This means we take our cues from our customers' actual needs.

## How does V-ZUG promote the circular economy?

To move from the current recycling economy to a circular economy will require a new mindset. We will develop from a manufacturer of household appliances into a company that is also

responsible for dismantling the appliances. This not only has a significant impact on the design but also on how materials are used beyond the initial life cycle of an appliance. Our aim is to keep resources in circulation for as long as possible in best condition. In 2024, we successfully closed our pilot circular economy factory and began incrementally preparing it for industrial operation.

## In 2024, there was still a shortage of skilled workers. How is V-ZUG strengthening its brand as an employer?

We strive to offer all our employees attractive jobs, including in production: The modern production facilities meet high standards. In addition, our working models allow employees a great deal of flexibility. We believe that as a technological leader in our sector, we enable forward-looking and meaningful work. Particularly in the circular economy, we are working on topics and challenges to keep us abreast of the times. Finally, in 2024, we once again invested in training so that we had the necessary specialists – for example with service engineers.

## What will happen in 2025?

We will establish further partnerships to implement our vision of the circular economy factory. This is also associated with our training initiative, which ensures the skills in the area of service and repair. In order to reduce our downstream emissions, we will continue to raise customers' awareness on how to use the appliances ecologically. And in future, our internal CO<sub>2</sub> fund will continue to enable new investments in favour of sustainability regardless of the economic situation.



**Peter Spirig**  
Chief Executive Officer

# Sustainability as part of the strategy

The V-ZUG brand and quality claims also include sustainability. The company develops resource-efficient products and investigates circular business models. Transparency, high social standards and the search for more ecological materials play a key role in procurement, in close collaboration with our suppliers. V-ZUG is responsible for ensuring that employees at the workplace remain healthy and can reach their full potential. With the ongoing transformation of the Zug site, V-ZUG is making itself fit for the future and investing in long-term business success.

Sustainability is a central pillar of the corporate strategy. This is also reflected in the company's vision, mission and core values. In doing so, V-ZUG pursues a holistic understanding of sustainability, taking into consideration the three dimensions of "Planet", "People" and "Profit" – i.e. the environment, society and business-related elements of success.

## Attaching equal value to environment, society and enterprise



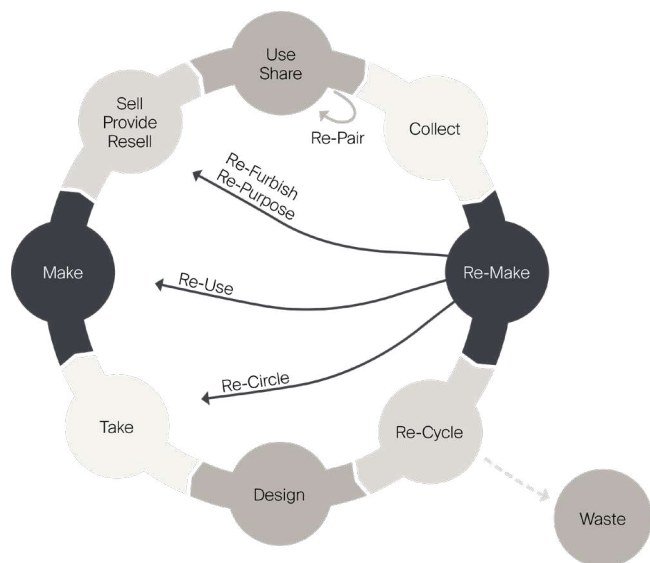
## Circular products and services

V-ZUG aims to make a positive contribution to a more sustainable society, which is gradually transitioning from a recycling economy to a circular economy. The selection of materials plays an important role in reducing the environmental impact of V-ZUG household appliances. V-ZUG produces high-quality and durable products and is increasingly looking to close the material cycles. This makes the circularity of V-ZUG devices a strategic concern. For this reason, the company invests consistently in this area across all departments. Based on the "R strategies" of the circular economy, V-ZUG pursues a comprehensive approach to reduce the footprint of the appliances throughout the entire life cycle, starting with product design and continuing through return and decommissioning of the appliances. In this connection, the quality and value of resources should be preserved for as long as possible.

In order to reduce the material intensity and footprint of the appliances and individual components, environmental aspects are already taken into account in development. For this purpose, V-ZUG prepares life cycle assessments for each product category. The calculations based on ecopoints create transparency and pave the way for targeted innovations. It will thus be possible to tangibly compare the environmental gains made by potential optimisation measures. V-ZUG aims to reduce the environmental impact of new appliance developments by 5% by 2030.

The circular economy also opens up new opportunities for more sustainable business models, such as "Product as a Service" and the sale of second-hand appliances. To seize these opportunities, we need innovative partnerships with suppliers and other providers (see the chapter "[Products and services for a future-fit society](#)").

## The circular economy – considering the entire life cycle and closing loops



### Energy efficiency and ecological use of appliances

Energy efficiency is another key factor in reducing environmental impact. More than 63 % of the V-ZUG household appliances are already among the top three energy classes (A-C). How ecologically the appliances can be used at home is equally important since a significant part of the environmental footprint arises during use. V-ZUG assumes responsibility for downstream emissions and implements various measures to raise customer awareness of how to use the appliances more ecologically. These include ecological product functions, transparent communication about consumption data in use, as well as numerous tips in the V-ZUG Home app and the V-Kitchen app. With the internationally available “CO<sub>2</sub> web shop”, customers can also voluntarily offset their CO<sub>2</sub> emissions.

### Environmental policy and climate risks

In its environmental policy, V-ZUG undertakes to measure the emissions resulting from operations and to prevent and reduce them to the best extent possible. By 2030, the aim is to reduce emissions from Scope 1 and 2 according to the Greenhouse Gas Protocol (GHGP) by 80 % compared with the base year 2020. To achieve this, V-ZUG is investing in more climate-friendly energy supply and energy-efficient buildings across all locations. Other measures include

gradually electrifying the vehicle fleet, as well as continuously optimising environmental and waste management. The internal CO<sub>2</sub> fund – financed by incentive taxes for CO<sub>2</sub> emissions released – plays a central role in this regard: With these funds, V-ZUG supports projects and initiatives that are beneficial on an environmental level but are not yet economically attractive. To ensure climate-neutral manufacturing operations today, V-ZUG has been offsetting its remaining emissions since 2020 through the “**V-Forest**” reforestation project in Scotland.

Indirect emissions in the upstream and downstream value chain (Scope 3) are to be reduced by 30 % by 2030. In 2024, V-ZUG submitted the 2030 climate targets for validation by the Science Based Target Initiative (SBTi).

As environmental and climate protection only succeeds through a joint commitment from business, politics and science, V-ZUG supports cross-sector projects. For example, the **Association for the Decarbonization of Industry**, which investigates the industrial production of hydrogen as an alternative to fossil fuels (see chapter “Environment and climate protection”).

In accordance with the climate reporting ordinance for large Swiss companies, V-ZUG is reporting for the second time on its climate risks in accordance with the Task Force on Climate-related Financial Disclosures (see TCFD report).

Resilient and committed employees

The top priority for V-ZUG is the well-being and commitment of its nearly 2,000 employees. The leadership principles and the principles of collaboration promote an appreciative and team-oriented working culture. The company is creating an inclusive working environment where all employees have the same chances of contributing and achieving their potential. Diversity is an important principle at V-ZUG: measures are continually being implemented to increase the share of women across all hierarchical levels. A balanced mix of generations is just as important. As a modern employer, V-ZUG enables flexible working models and uses agile forms of collaboration. The accredited health management system along with training and health initiatives ensure high standards of occupational safety and working conditions. V-ZUG has also borne the “Friendly Work Space” label since 2022. The targeted training of employees is another key element in strengthening the innovative capacity and competitiveness of V-ZUG (see chapter “Resilient and committed employees”).

Responsible business activity

V-ZUG’s business is carried out in accordance with applicable laws and international standards. The Code of Conduct applicable to all employees sets out the principles of entrepreneurial conduct. When dealing with suppliers, the Code of Conduct for Suppliers ensures that social, environmental and ethical standards are enforced. As a “fair player”, V-ZUG has a ze-

ro-tolerance policy when it comes to corruption, anti-competitive behaviour as well as forced and child labour. In accordance with the Swiss Ordinance on Due Diligence and Transparency in relation to Minerals and Metals from Conflict-Affected Areas and Child Labour, V-ZUG discloses its figures, risks and measures annually (see [DDTrO report](#)). In addition, IT security and data protection are high-priority concerns (see chapter “Entrepreneurship for sustainable prosperity”).

Sustainability governance

The Head of Sustainability is directly subordinate to the CEO of V-ZUG and leads an interdisciplinary working group, the “Sustainability Workforce”. The decentralised organisation of sustainability management is a deliberate decision. Sustainability efforts permeate the entire company, enjoying greater momentum and broad support across the various departments. The team of ten representatives from different departments drives the strategic and organisational anchoring of sustainability and identifies forward-looking projects. The Sustainability Workforce meets monthly and reviews the status of operational strategy implementation. Relevant project progress is discussed in detail within the scope of topic-specific streams. The Compliance department assists with legal issues, in particular in the implementation of corporate obligations under the Swiss Code of Obligations. It is also consulted with respect to supplier management and TCFD reporting.

Strategy overview: Sustainability is a foundation stone of V-ZUG’s corporate strategy

Business initiatives	Strategic objectives						Foundation stones
Portfolio	We are a <b>global premium customer-driven brand</b> .	We simplify our customers’ daily routines with <b>distinctive, innovative, long-lasting products</b> . We <b>maintain the relationship</b> across the entire product life cycle.	We trust data in shaping our markets. We understand our customers’ needs and effectively interact with them. <b>We lead the way.</b>	Switzerland is our home. Global metropolitan areas show our potential. <b>We drive growth across all target markets.</b>	Collaborating <b>closely</b> with our distribution partners and our clients is our unique selling point.		Quality and productivity
New business models							Exploit data
V-ZUG brand							Sustainability
Switzerland							Corporate culture
International							

The Head of Sustainability informs the Executive Committee of V-ZUG monthly about the progress made in achieving the annual targets relevant to sustainability. It is also consulted ad hoc in strategic decisions and in reporting on non-financial matters. Sustainability is an integral part of company-wide risk management, with climate-related aspects examined in the TCFD reporting process. The Board of Directors of V-ZUG regularly discusses sustainability topics at the periodic meetings and signs non-financial reporting.

Since 2022, the management of V-ZUG has been assessed against the implementation and achievement of the strategic sustainability goals. In 2024, the focus was on the objectives in the circular economy.

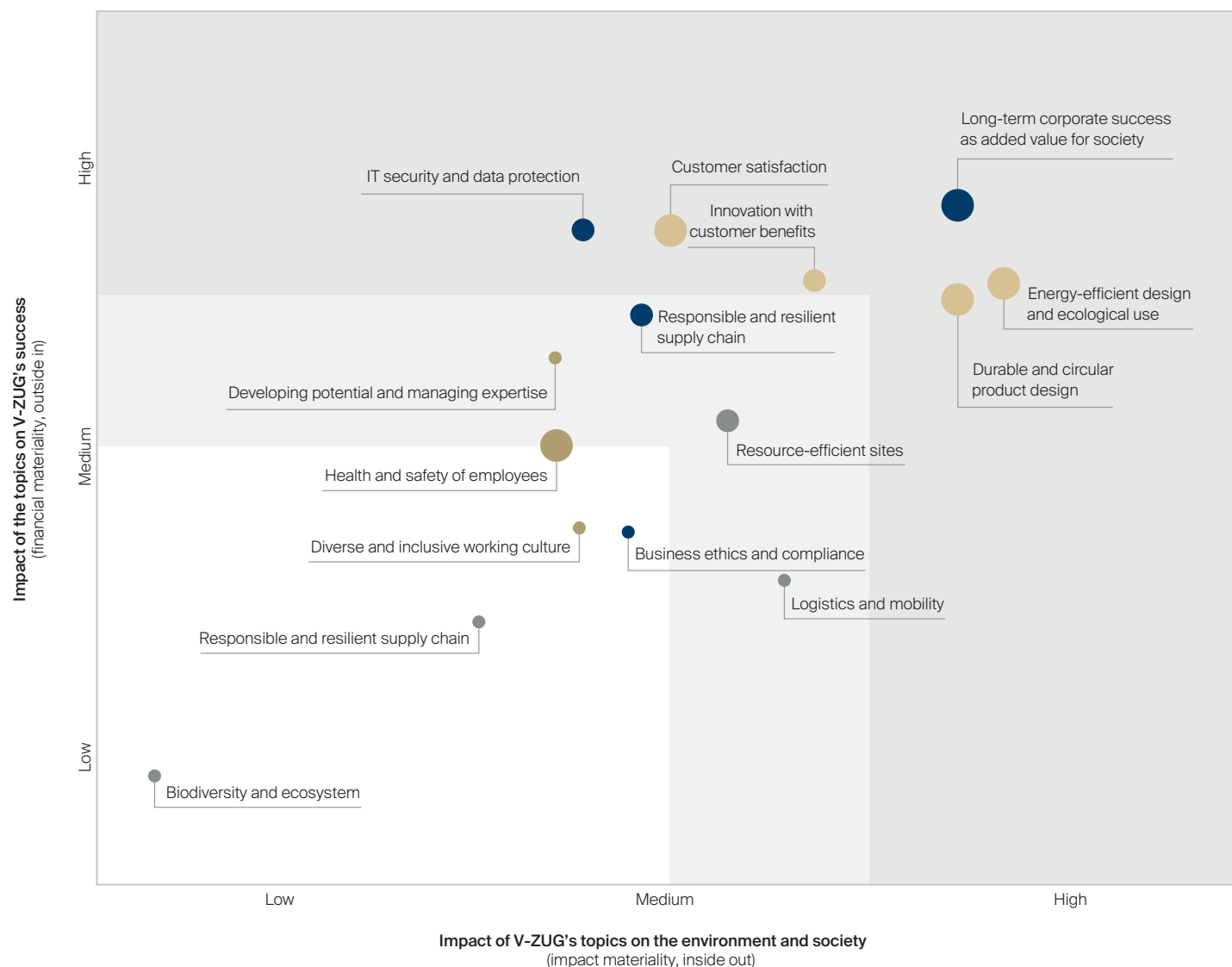
### Materiality analysis and focus topics for 2030

In 2024, V-ZUG conducted a new materiality analysis and updated the matrix of the key sustainability topics. The company is not yet subject to reporting under the Corporate Sustainability Reporting Directive (CSRD) of the European Union. Nevertheless, the materiality analysis was carried out with the future in mind, according to the method of double materiality, as required by the European Sustainability Reporting Standards (ESRS). On the one hand, the actual and potential positive or negative impacts of V-ZUG on the environment, society and the economy were identified; this is referred to as impact materiality (“inside out”). On the other hand, risks and opportunities that have an impact on the company and its financial stability from the outside world were identified, known as financial materiality (“outside in”).

In an initial step, the internal Sustainability Workforce revised the list of possible material topics. The completeness of this list was reviewed with the help of feedback from internal and external stakeholders. A total of 15 material topics were identified. Some issues are new, and others have been specified in greater detail. For example, the topic of energy-efficient design and ecological use is now excluded from the topic of “Durable and circular product design” and stated separately due to its strategic importance. This also applies to “IT security and data protection”, which were previously included in the topic of “Business ethics and compliance”. The previously implicit topics of customer satisfaction and innovation are now more visible. The topic of “Innovation with customer benefits” now also includes the earlier topic of “Sustainable consumption and healthy nutrition”. The topic of “Biodiversity and ecosystems” was also included for the first time. Since V-ZUG would like to hold on to its own topics which have not been specified by the ESRS of the EU, the V-ZUG sustainability issues have been matched with the ESRS subtopics.

The Sustainability Workforce then identified and evaluated 168 specific impacts, risks and opportunities. According to ESRS requirements, actual and potential positive or negative impacts were assessed in their extent and scope. In the case of negative impacts, the severity was additionally estimated; for potential effects, however, the probability of occurrence was estimated. This resulted in the overall severity of a positive or negative impact. In terms of risks and opportunities, the probability of occurrence and extent were determined. For all parameters, a scale of 1 to 3 was applied (1 for low/small, 2 for medium, 3 for high/large). In addition, weighting was applied to highlight the strategic importance of key impacts, risks and opportunities. If a highly scored item seemed particularly relevant from a business perspective, the weighting was doubled. Finally, the individual impacts, risks and opportunities were aggregated and combined into the corresponding sustainability topic. In order to support the results more broadly, V-ZUG conducted an online survey, obtaining opinions from 62 stakeholders from the economy, politics and society on the resulting new matrix. Stakeholders were asked to assess the relevance of the topic from their point of view. The new materiality matrix was approved by the Executive Committee and the Board of Directors of V-ZUG.

## Revised materiality matrix (2024)



The materiality matrix of V-ZUG comprises four dimensions. The X-axis shows the impact of the relevant topics on the environment and society (inside out), and the Y-axis its impact on the success of V-ZUG (outside in). The point size represents relevance for stakeholders and grey shading shows V-ZUG's strategic focus.

### Classification of focus topics

#### Products and services for a future-fit society

- Energy-efficient design and ecological use
- Durable and circular product design
- Innovation with customer benefits
- Customer satisfaction

#### Resilient and committed employees

- Developing potential and managing expertise
- Health and safety of employees
- Diverse and inclusive working culture

#### Environment and climate protection

- Resource-efficient sites
- Logistics and mobility
- Operational waste management
- Biodiversity and ecosystem

#### Entrepreneurship for sustainable prosperity

- Long-term corporate success as added value for society
- IT security and data protection
- Responsible and resilient supply chain
- Business ethics and compliance

#### Strategic focus

- Strong
- Medium
- Low

#### Relevance to stakeholders

- High
- Medium
- Low

As before, the 15 material topics were summarised in the four guiding focus topics. These also provide the framework for non-financial reporting:

- Products and services for a future-fit society
- Resilient and committed employees
- Environment and climate protection
- Entrepreneurship for sustainable prosperity

The respective chapters provide an overview of the strategic goals and the outcomes achieved in 2024 ("Targets, facts and figures"). In the annex "[Impacts, risks and opportunities](#)", the relevant elements for each sustainability topic are explained in detail. In the future, additional indicators will be established for a number of new topics.

### Contribution to the UN's Sustainable Development Goals

V-ZUG aligns itself with the United Nations' (UN) 2030 Agenda for Sustainable Development and has been a member of the Swiss Triple Impact (STI) initiative since 2020. STI is dedicated to promoting the attainment of the 17 Sustainable Development Goals (SDGs). This Swiss initiative helps organisations of all sizes and from all sectors of the economy boost their fitness for the future by integrating the SDGs into their business operations. In workshops and via questionnaires, V-ZUG determined in which of the 17 SDGs the company could have the greatest impact on. Although all the SDGs are interconnected, V-ZUG focuses on the topics that are directly affected by its business activities.

SDG	Contribution of V-ZUG to the SDGs
<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<ul style="list-style-type: none"> <li>• Products are resource- and energy-efficient in use</li> <li>• Use and expansion of renewable energy sources at our production sites, e.g. the construction of the Multi Energy Hub as part of the Tech Cluster Zug project ("Environment and climate protection")</li> <li>• Energy efficiency in our processes and in facilities management, e.g. by using energy from waste heat</li> </ul>
<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<ul style="list-style-type: none"> <li>• Investment in development and training, and also the employability of our staff across all generations</li> <li>• Investing in the vocational education and training of young people</li> <li>• Varied, interesting careers and employee advancement</li> <li>• A high degree of job security and a positive influence on employee health</li> <li>• Promoting equal opportunities and diversity</li> <li>• Contributing to the attractiveness of the sites in Zug and Sulgen, and creating attractive and varied jobs for the local workforce</li> <li>• Setting high labour standards in the supply chain</li> <li>• Focusing on healthy economic growth, taking into account people and the environment</li> </ul>
<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	<ul style="list-style-type: none"> <li>• Developing circular products</li> <li>• Internal and external innovative strength</li> <li>• Modern, resource-saving industry and infrastructure, particularly in developing the Zug site and the new building in Sulgen</li> <li>• Using high environmental construction standards and innovative, sustainable construction methods at the Zug development site</li> </ul>
<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	<ul style="list-style-type: none"> <li>• High-quality, durable and serviceable products with spare parts available for a period of up to 15 years</li> <li>• Transparent product information for informed purchasing decisions</li> <li>• Raising the awareness of end customers for the optimum resource- and energy-efficient use of appliances</li> <li>• Supporting healthy, balanced nutrition and avoiding food waste</li> <li>• Energy-efficient, resource-efficient production</li> <li>• The use of circular materials</li> </ul>
<b>13</b> CLIMATE ACTION 	<ul style="list-style-type: none"> <li>• Preventing, reducing and – where necessary – offsetting emissions that are harmful to the climate and the environment</li> <li>• Carbon-neutral production of Swiss-made appliances by offsetting through the V-Forest reforestation project</li> <li>• Internal carbon offset levy of CHF 120 per tonne of CO<sub>2</sub></li> <li>• Establishing environmental standards within the supply chain</li> <li>• Raising employee awareness, e.g. through the new mobility strategy</li> </ul>

V-ZUG's contribution to SDGs 7, 8, 9, 12 and 13





Breakroom in the new production building "Zephyr Ost".  
 Attractive industrial workplaces increase the motivation and well-being of employees.



# Products and services for a future-fit society

**V-ZUG customers trust that their household appliances are both durable and of impeccable quality. Ecological product functions as well as numerous tips on the V-ZUG apps make it easier to use the appliances in an environmentally friendly manner. V-ZUG is continuously increasing its energy efficiency and investing in circularity. In order to conserve existing resources, it is important to keep the materials and components in circulation for as long as possible in best condition. Thanks to innovative partnerships, a well-functioning circular economy is gradually taking shape.**

## Circular products and services

The circular economy calls traditional production processes into question and implies a comprehensive transformation of the business: away from the throw-away economy and recycling towards one with closed material cycles. This paradigm shift is challenging given the complex value chains. However, internal calculations using practical examples show that a circular economy pays off. V-ZUG is promoting this transition by implementing the “R strategies”, which have been tested in the **“circular economy factory”** pilot project. V-ZUG will gradually prepare the factory for future industrial operation.

In addition to having long service lives, the appliances must also be repairable. Repairability has always been part of the V-ZUG quality guarantee. Appliances that prematurely leave the cycle of use – such as showroom appliances or customer returns – are refurbished, where possible. Instead of being prematurely passed for recycling, the appliances are given a new life and can be purchased in the **online shop of the SIBIR Group**. In cases where refurbishing is inappropriate, the appliances are disassembled. This makes straightforward disassembly and modularity key.

Disassembly is the prerequisite for the next “R strategy”: suitable components are removed from used appliances, inspected for quality and reused where possible. An example of this is the reusable counterweights in washing machines. In 2024, V-ZUG commissioned Gemeinnützige Gesellschaft Zug (GGZ), a non-profit organisation in the secondary labour market, to disassemble additional washing machines. In order to scale up disassembly in the future, V-ZUG will examine cooperation with industrial partners.

## Profitable partnerships

The next “R strategy” aims to reuse pure-grade materials to the greatest extent possible. As a result, they will remain in circulation and require fewer primary resources (recircling). Innovative partnerships with suppliers and third-party suppliers are essential for achieving this. The Procurement and Development departments are also working closer together within V-ZUG. During the strategic selection of possible materials, the departments are increasingly checking whether suppliers can take them back. V-ZUG has already established this for individual materials, for example with plastic manufacturer Georg UTZ AG. The manufacturer takes back the plinths of washing machines and processes the material into new plinths. The remaining reusable materials are sorted into the most appropriate path for recycling. This is only possible due to the disassembly of the appliances, as it prevents material mixing – unlike conventional shredding. Partnerships with external buyers are also being reviewed in connection with recycling. In addition, certain appliance components can also be repurposed. For example, designers of V-ZUG came up with stools and side tables made from used washing machine drums. The first models were sold in 2024.

The implementation of the “R strategies” shows that the circularity of an appliance starts as early as the design phase. Accordingly, V-ZUG consistently develops new products in accordance with the ten “Design to Circularity” principles.

## Transparency thanks to product life cycle assessments

V-ZUG prepares life cycle assessments for all product categories to determine how an appliance affects the environment throughout its life cycle. The life cycle assessments are evaluated using three methods: according to ecopoints (EPs), CO<sub>2</sub>-equivalent and monetary value. Assessments in accordance with environmental scarcity (ESM2021) measured in EPs are particularly useful, as they take into account 17 categories of impact. These include the greenhouse gas effect, soil and water acidification, noise and toxicity for humans and the ecosystem. Based on these indicators and taking into account the cost of manufacturing, V-ZUG already selects materials and processes with the lowest possible environmental impact during the development phase. V-ZUG has set itself the goal of reducing the EPs of new products by at least 5% compared to the previous model. One example of this is the new refrigerator plat-

form: even with an EP increase of 39 % due to the new vacuum insulation panel in the installed state, the improved energy efficiency reduces the EPs by around 20 % over the entire lifespan of the appliance. In 2024, V-ZUG also introduced the new “Adora” dishwasher. It is built with low-carbon steel and, thanks to the new bitumen insulation, is also more energy efficient and cost efficient. It is therefore worthwhile to invest more in the installed materials during manufacturing – the “grey energy” – as the overall life cycle assessment improves over the useful life. Conversely, this demonstrates the importance of dismantling the appliances and keeping the high-quality materials in circulation.

Based on the product life cycle assessments, V-ZUG initiated the “Circular materials” project in the reporting year, which is financed by funds from the internal CO<sub>2</sub> fund. The project is initially focused on metals and plastics and explores how the circularity of these material flows can be improved. In the spirit of lean management, the goal is to reduce process complexity and material diversity and reuse the resources as effectively as possible. A high recycling and reuse rate is already a fundamental product requirement today. V-ZUG strives for a recovery rate of no less than 90 % with new developments.

In order to make the results of the product life cycle assessments available to a wider public, in 2025 V-ZUG will publish product sustainability reports (PSRs) for the first time on its website. These provide V-ZUG customers with detailed information on the environmental footprint of the appliances.

### Using energy-efficient appliances ecologically

The product life cycle assessments show how the environmental footprint can be reduced when manufacturing appliances. They also show the impact of electricity consumption on EPs when the appliances are used at home. V-ZUG already provides highly energy-efficient products. Since the technical possibilities for increasing energy efficiency will soon be exhausted, the way customers use the appliances is key. V-ZUG assumes responsibility for downstream emissions during use and helps its customers to use their appliances more ecologically. The numerous ecological functions significantly reduce the environmental footprint of the standard programs. While these have longer run times, they require less energy and water for an equal result. V-ZUG provides customers with comprehensive information to make more ecological decisions. Integrated EcoManagement predicts the energy and water consumption, depending on the program selected. In addition, V-ZUG takes advantage of the opportunities offered by the digitalisation and networking of household appliances, and offers numerous energy savings tips in the V-ZUG Home app and on the website.

### Innovation and customer satisfaction

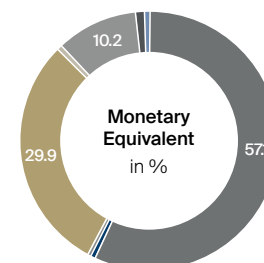
V-ZUG invests around 8 % of its annual turnover in research and development. This investment focuses on achieving progress towards sustainability and for the benefit of customers. Innovations are always intended to provide customers with both ease of use and ecological added value.

Besides the existing, extensive programs, “V-Upgrade” enables customers to access additional functions for a limited time, as required. These special, technically complex programs are a practical option for customers looking for specific upgrades compatible with existing cheaper models. As a result, the lifespan of the V-ZUG appliance can be extended without having to make an additional purchase. Customers can be inspired by healthy recipes in the V-Kitchen app and get tips on minimising food waste.

V-ZUG once again achieved high customer satisfaction in the area of services in 2024 according to the Net Promoter Score (NPS: +74). In response to brand awareness surveys, customers stated that V-ZUG was considered the first choice for household appliances, particularly due to its quality (93 %), the trustworthy brand (87 %) and good service (86 %).

### Sustainable business models

The longevity and timeless design of all V-ZUG appliances are an important basis for further business models. Thanks to the “Second Life” model, used appliances in faultless condition gain a second life after upgrading. On the other hand, V-ZUG offers an alternative to buying a new appliance with the **“Product as a Service” business model** (PaaS): the household appliances remain the property of V-ZUG, who is responsible for service in the event of accident or damage. As part of the user agreement, our business customers obtain service solutions at fixed rates. At the end of the contract, V-ZUG takes back the appliances and thus controls the flow of materials, which has a positive effect on the environmental footprint. V-ZUG is convinced that these innovations correspond to changing customer needs. Against this background, the PaaS model has been expanded to include other product categories. In 2024, the first projects in the kitchen area were carried out in cooperation with external partners. At the end of 2024, more than 1,000 appliances in the PaaS model were already under contract throughout Switzerland.



	in %   in kg CO <sub>2</sub> e	in %   in EP	in %   in CHF
● Manufacturing (cradle-to-gate)	27.5   211	35.7   849,000	57.1   644
● Packaging	1.3   10	0.7   16,700	0.5   6
● Transport	0.4   3	0.2   5,120	0.2   2
● Use – Electricity	44.4   337	44.6   1,060,000	29.9   337
● Use – Water	1.0   7	0.9   21,000	0.6   7
● Use – Detergent	20.0   153	15.3   362,700	10.2   115
● Effect of detergent in water	1.7   13	1.1   27,000	1.1   12
● Recycling/Disposal	4.1   32	1.5   35,222	0.4   5
<b>Total (cradle-to-cradle)</b>	<b>100.0   766</b>	<b>100.0   2,376,742</b>	<b>100.0   1,128</b>



**Product life cycle assessment AdoraDish V6000 with heat pump – presented in three perspectives:**  
CO<sub>2</sub> footprint in tCO<sub>2</sub>, ecopoints in EPs and monetary equivalents in Swiss francs (CHF) are used for each product category in the new product sustainability reports (PSRs).

## Targets, facts and figures

Targets	Baseline and target years	Status
<b>Efficiency</b>		
Increase fleet efficiency of all appliances (energy and water) by 5% – new: energy +10% from 2024	2021; 2030	E: Achieved in 2023 W: On track
One appliance per product category in the top 3 for efficiency (comparison site TopTen)	Annual review	Not achieved
All current network-enabled appliances have extensive integrated ecofunctions/services	n.a.; 2025	On track
<b>Circularity</b>		
Life cycle assessments for all appliances (one reference model per category)	n.a.; 2023	Achieved (since 2023)
Achieve 90% recyclability of appliances	Development projects; 2025	On track
Reduce ecopoints (EPs) by 5%	Development projects; 2030	On track
All appliances developed according to circularity principles	Development projects; 2030	On track

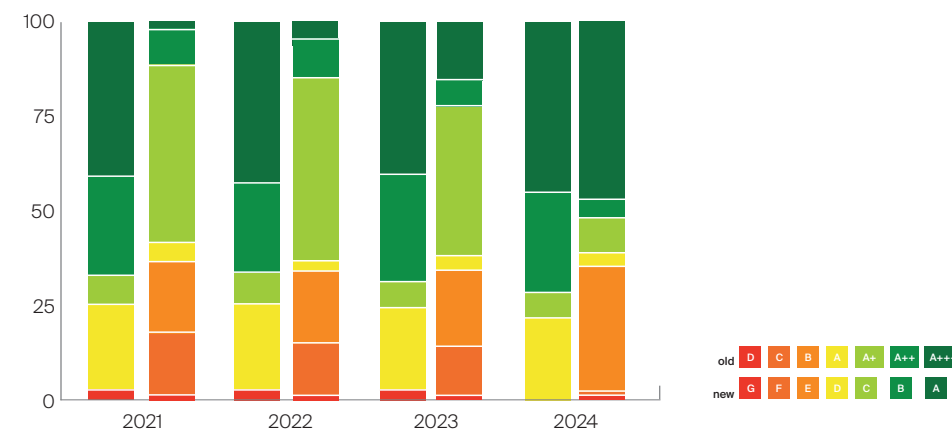
Targets, results and status in relation to the focus topic “Products and services for a future-fit society” (abbreviated; details in the appendix to the Sustainability Report)  
Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

### Contribution to SDGs 7, 9, 12 and 13



V-ZUG offers durable, energy-efficient household appliances and promotes their circularity. The materials and components of the V-ZUG products should be easy to repair, refurbish, reuse or recycle. As a result, the high-quality appliances and their components remain in circulation for longer and provide added value for the benefit of the environment. Circular approaches and business models can be used to structure the economic system in a more resource-efficient manner and decouple prosperity from environmental impact. In addition, V-ZUG is raising customer awareness with respect to more environmentally friendly appliance use and a more sustainable lifestyle.

### Appliances supplied with label, by energy class

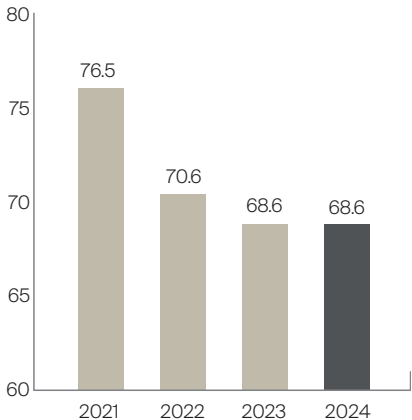


### Efficiency class A is standard for V-ZUG appliances<sup>1)</sup>

In 2024, around 99% of all V-ZUG appliances shipped once again had an energy efficiency rating of A or higher (adjusted to standard label to enable comparison<sup>1)</sup>). The dishwasher “Adora” was optimised in 2024 and was raised from class C to class A. In the case of refrigerators, various appliances have been upgraded from class F to class E. Following the introduction of new, more stringent energy efficiency regulations in March 2021, the energy efficiency classes for washing machines, dishwashers and refrigerators were rescaled (column on right). In the 2024 reporting year, the number of appliances sold in category A was increased from 16% to 47% (+31 percentage points), and the quantity in the three highest efficiency classes (A to C) was kept at a gratifying 63% (rescaled products).

<sup>1)</sup> Applies to V-ZUG appliances with a regulatory energy efficiency classification according to the energy efficiency regulations in force at the end of 2021. For ease of comparison, we have stated already rescaled appliances according to both the old and the new classification. Some types of appliances are not assigned an energy classification (e.g. hobs and microwaves). Such products account for around 19% of all V-ZUG appliances shipped.

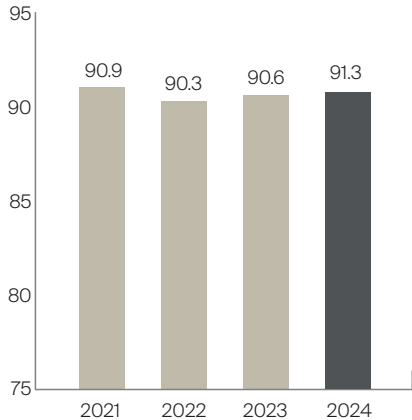
Fault rate<sup>1)</sup> in %



**Faults are extensively examined to determine cause**

Thanks to sustained quality initiatives, V-ZUG is continuing to implement many improvements across the company and consequently the fault rate remained stable at 68.6% (indexed to the 2015 baseline). All problems are tracked and analysed by Product Quality Monitoring and then processed in a targeted manner.

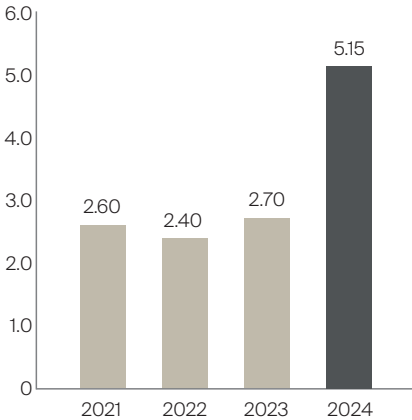
First-time fix rate<sup>1)</sup> in %



**First-time fix rate remains very high**

The first-time fix rate for service visits in 2024 reached a very high value of 91.3% (2023: 90.6%). During service visits, even more cases could be dealt with on the first visit, which reinforced customer satisfaction. Due to reduced resources in service (shortage of skilled workers), the focus was specifically on the first-time fix rate; the response time was thus positively influenced.

Average response time in days<sup>1)</sup>



**Method for measuring response time adjusted – customer satisfaction once again very high**

The method of measuring the response time was adjusted in 2024 and now also includes cases where response times are not urgent on customer request. The higher value for 2024 is therefore not directly comparable with previous years. However, even taking into account the adjusted method, the average response time has increased by just under one day compared to the previous year. This is mainly due to the shortage of skilled workers. Nevertheless, service quality and customer satisfaction remained high. Customers rewarded V-ZUG with a Net Promoter Score (NPS) of +74. The V-ZUG brand was once again viewed very positively and recognized for its sustainability.

<sup>1)</sup>Swiss market values (representing approximately 80% of Group sales).



## Promoting the circular economy in product design

The ten principles of circular design at V-ZUG

- 1) Enable disassembly/restorability
- 2) Enable reuse
- 3) Reduce materials
- 4) Integrate electronics sparingly and consciously
- 5) Modularity for retrofitting
- 6) Use of recyclable materials
- 7) Environmentally friendly selection of materials
- 8) Enable environmentally friendly use
- 9) Promote repairability
- 10) Promote longevity

Circular materials:  
step by step  
towards greater  
sustainability  
[Read more here](#)

Dismantling of washing machines in line with the circular economy. In partnership with the non-profit social institution Gemeinnützige Gesellschaft Zug (GGZ), which dismantles appliances on behalf of V-ZUG.



# Resilient and committed employees

**There are around 2,000 employees working at V-ZUG who develop innovative products and provide trustworthy services in a committed and customer-oriented manner. As an employer, V-ZUG acknowledges its responsibility for the well-being of its employees. The accredited corporate health management system ensures high standards of occupational safety and working conditions. Numerous initiatives create an attractive working environment where employees can realise their potential. V-ZUG fosters a culture of appreciation, self-efficacy and equal opportunities in line with its core values.**

## Value-based collaboration

V-ZUG offers its customers high-quality, durable household appliances made in Switzerland, as well as reliable and fast service. This commitment to excellence lies at the heart of V-ZUG's vision and mission, with the aim of maintaining customer satisfaction at a high level. This requires forward-looking and value-oriented corporate governance as well as a dynamic and inspiring working environment. This allows employees to give their best, while remaining resilient.

V-ZUG's leadership principles establish a leadership culture which is based on mutual support and promotes interdisciplinary cooperation and practical exchange. The principles establish five entrepreneurial competencies that make a successful manager. In the reporting year, more than 280 executives regularly met in exchange groups and continued to reflect on the principles based on practical cases from day-to-day management. The principles of collaboration create a working culture that strengthens the personal responsibility of employees. Constructive feedback, critical thinking and active listening are highly valued.

## Strengthening participation

V-ZUG surveys its employees regularly to stay abreast of their sentiment and needs. In the reporting year, an interim survey was conducted to review the implementation of the last global employee survey in 2023. The identified improvement measures are implemented at departmental level. Feedback from around 700 employees showed that they want to actively shape the company and feel heard. The next global employee survey will take place in 2025.

In many strategic initiatives, V-ZUG focuses on grassroots formats and inclusive, proactive communication. The "Be Aware" programme calls attention throughout the company to im-

portant topics, including sustainability. More than 80 employees act as ambassadors and raise awareness in their teams – a conscious departure from hierarchical communication by managers. Four "Be Aware" thematic months are held each year. For example, the joint understanding of the V-ZUG brand was reinforced in autumn 2024.

In addition to formal communication channels such as regular employee events, V-ZUG also makes sure to maintain informal dialogue. With "VivaEngage", employees can exchange ideas and network, thereby strengthening cohesion across the Group. The new intranet was also launched at the end of 2024. The multilingual platform brings together all work-related information and tools. It integrates seamlessly into the existing digital work environment, making it more user-friendly and easily accessible.

## Productive flexibility

V-ZUG is convinced that flexible and agile working structures have made its employees more satisfied and more productive. In recent years, V-ZUG has established the concept of "Smart-Work". The teams decide for themselves how they collaborate with one another. Clear agreements make it easier to handle possible pitfalls of flexible work, such as ensuring constant availability. Hybrid forms of work reduce commuting times and help to strike a better balance between work and private life. V-ZUG enables part-time positions, condensed working days, job sharing and unpaid periods of leave. In addition, V-ZUG is continuously digitising work processes, thereby increasing efficiency. Employees receive training in "scrum" and "design thinking" methods and use the scaled agile framework to implement digitalisation projects.

## Inclusion and diversity

Fairness and equal opportunities are core values at V-ZUG. Inclusion and diversity can generate creative added value and contribute to business resilience. A wide variety of life experience, career backgrounds and cultural practices can already be found among V-ZUG employees today. Respect and tolerance characterise day-to-day work. V-ZUG does not tolerate discrimination, for example, on the basis of gender, age, origin or religious or political beliefs. Given the shortage of skilled workers, it is more necessary than ever to make full use of the available talent pool. Since the topic of "people and culture" is represented in the Executive Committee, matters of greater inclusion, diversity and equal opportunity are firmly engrained at the highest corporate level.



V-ZUG pays particular attention to the mix of generations and gender. The company aims to have women represent 25% of the management team, including the Executive Committee and Board of Directors, by 2030. Their representation is also expected to increase throughout the entire company. As an industrial enterprise, it remains a challenge to increase the proportion of women. It stood at 24.2% throughout the company in 2024, which is effectively a slight increase (2023: 23.7%). V-ZUG takes various measures to promote women in a targeted manner. The company once again participated in the diversity benchmark of the University of St. Gallen in 2024 and gained further insights to promote diversity. The "Trau dich!" campaign, which was launched in 2023, had 20 participants in the reporting year. Their self-efficacy and competency are promoted in the course of development meetings, seminars and internal networking. In addition, new standards for recruitment are intended to prevent possible gender stereotyping and prejudices. In 2024, managers completed a mandatory training programme on this topic. Moreover, a guideline for inclusive communication has been drawn up. Overall, V-ZUG strives to increase awareness of diversity in existing structures throughout the company, including within the framework of the "Be Aware" programme. V-ZUG also regularly takes the opportunity on World Women's Day or the Day of Tolerance to draw attention to the importance of gender equality and inclusion. Equal pay for equivalent work has been a matter of course at V-ZUG for years. The next analysis on pay equality will be carried out in 2025.

In the area of inclusion, V-ZUG strives to give work opportunities to people with disabilities. In cooperation with the Obvita Foundation, depending on the state of the order book, V-ZUG employs between 10 and 15 people with a disability for less complicated tasks at the refrigerator factory building in Sulgen. A more comprehensive strategic disability concept will be developed in 2025. At V-ZUG, "inclusion" also means maintaining employment for employees who, after a health-related absence, are supported by corporate case management and reintegrated into the company. The reintegration rate is more than 75%.

### Occupational health and safety

The occupational health and safety management programme is certified according to ISO 45001. V-ZUG has also borne the "Friendly Work Space" label since 2022. The company addresses issues of physical and mental health in a variety of ways. External counselling is available to employees who find themselves in difficult situations or who have serious grievances.

Inadequate occupational safety precautions can lead to health-related issues and unnecessary costs. To avoid these, V-ZUG has a three-part occupational safety concept. It consists of control checks, low-threshold security directives in the production teams and the decentralised structure of the occupational safety contacts. A total of 26 trained employees serve as occupational safety contacts in their departments. Together with those responsible for occupational safety, they increase the awareness of possible hazards in the workplace throughout the company and explain correct behaviours. Managers attend half-day training sessions at SUVA to make them aware of their legal responsibility and the need to set an example. Every year, V-ZUG also conducts a campaign on occupational safety: during the reporting year, the focus was on the risks of electrical accidents. In 2024, V-ZUG missed the accident reduction target. Hours lost due to occupational accidents increased by 0.08 percentage points to 0.32% (relative to target hours).

### Education and training

Well-trained employees with future-oriented expertise are essential for the competitiveness and innovative capacity of V-ZUG. In the reporting year, the company invested 0.65% of wages paid in education and further training as well as 1.36% of wages paid in vocational training. V-ZUG's further training strategy and strategic career and succession planning are founded on an individual competency and performance-based evaluation. This follows the internal competency model. In annual "V-Compass" feedback meetings, the employees' development prospects are determined and development goals defined in a collaborative manner.

In order to promote continuous learning and the ongoing employability of employees, the "V-ZUGacademy" offers courses, trainee programmes and management training. In addition, regular technical and specialist training is offered. In 2024, V-ZUG launched the new "V-ZUG Learning" e-platform for the entire Group. This gives employees the opportunity to receive further training, with no scheduling or location constraints. Besides voluntary modules, there are also mandatory training courses, such as compliance or cybersecurity topics. V-ZUG also trains young apprentices; 93 in 2024.

# Targets, facts and figures

Targets	Baseline and target years	Status
Occupational safety: Vision "Zero" and annual reduction in the number of accidents by 5 %	Annual review	Not achieved
Long-term health: we will stabilise the absence rate by 2025 and lower it long-term	2020; 2025	Delayed
Investment in education and training: 0.65 % of wages paid	Annual review	Achieved
Investment in vocational training: 1.35 % of payroll spend	Annual review	Achieved
Diversity: we will increase the proportion of women across the Group	N/A; 2025 (new: 2030)	
1) In leadership team, incl. BoD, to >25 %		1) Delayed
2) Same proportion in management team as across the entire company (see 3)		2) Delayed
3) In the entire company		3) On track
Inclusion: employees feel included and demonstrate commitment, and work satisfaction is high: target >80 %	Survey every 2 to 3 years	On track

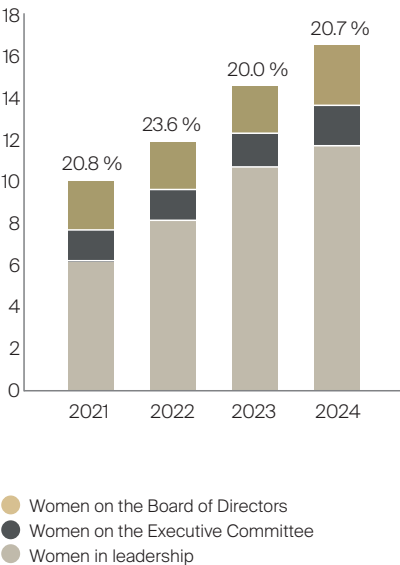
Targets, results and status in relation to the focus topic "Resilient and committed employees" (Short form; greater detail in the appendix to the Sustainability Report)  
 Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

## Contribution to SDG 8



V-ZUG creates secure jobs as well as fair and attractive working conditions. Corporate HR and health management complies with high standards. The company invests in the employability of its employees and offers young people numerous apprenticeship programmes and exciting development paths. V-ZUG takes inclusion and diversity seriously, creates job opportunities for people with disabilities and provides equal pay for equivalent work.

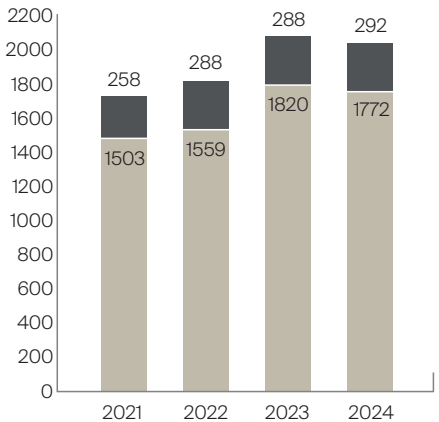
## Women in management roles



## Continued rise in number of women in senior management

The proportion of women in the leadership team increased by 0.7 percentage points in 2024 to 21.5% compared to the previous year. Across the company in 2024, the proportion of women overall was 24.2%, and in all management roles it was 20.7%. Both figures rose slightly in the reporting year.

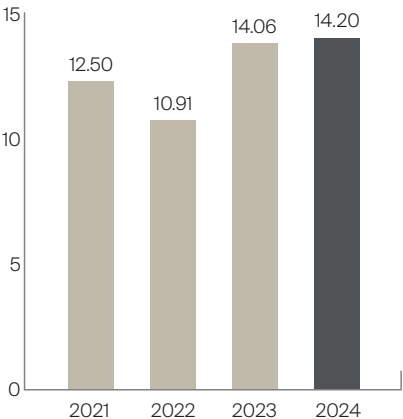
## Permanent employees by part-time/full-time working hours



## Flexible working models

Across the Group, most V-ZUG employees continued to work full-time (85.9%) in 2024. The number of employees working part-time increased slightly (14.1%). The level of employment can be adjusted to individual needs at the beginning and/or during employment. Part-time work is particularly popular in Switzerland.

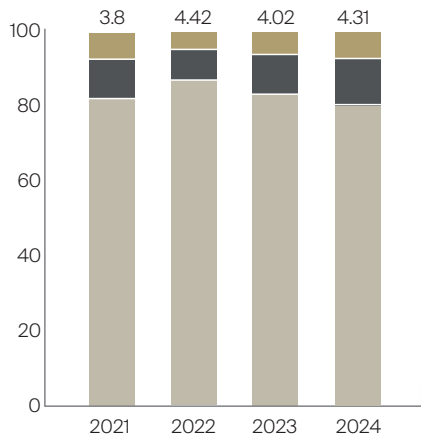
Turnover rate <sup>1)</sup> in %



### The turnover rate rose slightly

In 2024, V-ZUG welcomed 233 new employees. Over the same period, 294 people left the company. This equates to a turnover rate (including retirees and apprentices) of 14.2%, up 0.14 percentage points compared to 2023.

Absence rate by cause <sup>1)</sup> in %

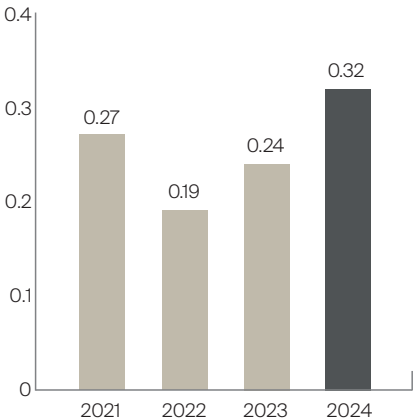


■ Occupational accident  
■ Non-occupational accident  
■ Illness

### Sickness accounts for the majority of hours lost

The lost hours rate for 2024 was 4.31% (in relation to contracted hours) in total, 0.29 percentage points higher than the previous year. Down almost 2.53 percentage points during the reporting year, illness was the most frequent cause of absence at 80.72%. The number of lost hours due to workplace accidents increased 0.08 percentage points from the previous year, as well as the number of workplace accidents. The reasons for this increase are not only the higher number of accidents, but also the improved data quality in recording lost hours.

Absence rate due to occupational accidents <sup>1)</sup> in %



### More occupational accidents reported

V-ZUG recorded 91 occupational accidents during the reporting year (previous year: 75). These generated a total of roughly 9,523 lost hours, or 0.32% of contracted hours (2023: 0.24%). V-ZUG put targeted measures in place and raised awareness of hazards in the workplace and correct conduct across the company. Nevertheless, the goal of reducing accidents every year has not been achieved. Efforts will be stepped up again in 2025

*"Head – Heart – Hand":  
 our path to  
 greater inclusion  
 and diversity*  
[Read more here](#)

<sup>1)</sup> Values for production sites between 2021 and 2022, and globally between 2023 and 2024.

# Environment and climate protection

**V-ZUG strives to avoid and reduce CO<sub>2</sub> emissions throughout its entire value chain. Within its own operations, the company is transitioning to renewable energy sources, building energy-efficient production and office buildings, and optimising the waste management concept. In addition, V-ZUG is investing in sustainable projects and in decarbonising the vehicle fleet. Direct emissions that cannot yet be avoided are offset by the “V-Forest”. In this way, V-ZUG is contributing to climate protection and continuously improving its carbon footprint.**

## Boosting eco-efficiency

V-ZUG measures production and business emissions and draws up annual business life cycle assessments for the three production sites of Zug, Sulgen and Changzhou according to the method of environmental scarcity (ESM2021). Together with the product life cycle assessments, these capture all environmental impacts caused by production processes, appliances and services over the entire life cycle. On this basis, V-ZUG calculates the ratio of the environmental efficiency to net sales. By 2030, V-ZUG aims to increase this value by 40 %, thereby decoupling economic growth from environmental impact. While environmental efficiency could not be increased in the reporting year, the cumulative figure amounts to +23 % compared to the baseline year 2020.

## Resource-efficient production

The site transformation at the Zug location is significantly reducing V-ZUG's environmental footprint. In the reporting year, the recently commissioned “Mistral”, “Zephyr Hangar” and “Zephyr Ost” buildings were connected to the **Multi Energy Hub** (MEH). MEH has supplied the site in Zug and its surrounding neighbourhood gradually with renewable energy since December 2022. It originates from various sources such as solar photovoltaics, ground and lake water, and the process heat from V-ZUG and neighbouring companies. This reduces the consumption of natural gas, which has a positive effect on the CO<sub>2</sub> emissions of V-ZUG. With the exception of buildings that will be demolished before 2030 or are no longer used by V-ZUG, all existing and new buildings are now connected to the MEH.

In 2024, V-ZUG installed a second press at the “Zephyr Hangar” production building. It supplements the first identical press, which was built in 2021 and enables a significant increase in capacity for component production. As a result, V-ZUG can decommission the older and

less energy-efficient presses. The new press makes V-ZUG significantly more ecological and efficient.

## Energy efficiency programme for the Zug site

The energy efficiency of production buildings and processes is an important factor for reducing the energy needs of V-ZUG. In order to manage and control energy consumption using data, V-ZUG established a comprehensive system in 2024, in cooperation with the Energy Agency for Economic Affairs (ENAW). As an initial step, V-ZUG set up energy accounting at the Zug site. The procedure, which was completed at the end of 2024, determines the energy consumption of the work and production processes in the individual buildings.

In the reporting year, V-ZUG also conducted an energy check-up for old and new buildings and processes with the support of the ENAW. In this way, the company identified potential for optimising energy consumption and defined measures to increase operational energy efficiency. The new building at its headquarters in Zug has already made significant improvements in this regard. By 2028, the office and production facilities will have fully relocated to the “Zephyr West” building, which will also have a positive impact on energy consumption.

With the support of the ENAW, V-ZUG developed a new reduction pathway for the period 2025–2034 in the reporting year and will submit it to the Federal Office for the Environment in 2025. In defining the reduction pathway, V-ZUG also took into account findings from energy accounting and energy check-ups. The base year is the 2024 financial year. The new reduction pathway replaces the previous pathway (2011–2024) and complies with the requirements of the Swiss CO<sub>2</sub> Act that came into force in 2023.

## Sustainability projects thanks to the CO<sub>2</sub> fund

Since 2018, V-ZUG has paid an internal CO<sub>2</sub> levy together with the Metall Zug Group. CHF 120 is paid into the fund for each ton of CO<sub>2</sub> emitted. This concerns all Scope 1 and 2 emissions as well as Scope 3 emissions from business flights. In 2024, the internal CO<sub>2</sub> fund also enabled V-ZUG to invest in environmentally worthwhile projects that are still challenging from a purely economic perspective. A pioneering project financed by the CO<sub>2</sub> fund is the pilot line for the industrial production of hydrogen. V-ZUG has been developing this project since 2022 in conjunction with the **Association for the Decarbonization of Industry**. Construction on the

line started at the end of 2024 at the Zug site, and test operations will run from 2025 to 2029. During this period, V-ZUG will use the hydrogen produced to power certain high-temperature processes in production. This will make it possible to replace natural gas, which reduces emissions. Due to the required level of purity, the company does not – for the time being – plan to use the generated hydrogen for operating electric lorries. The economic and technical potential will be assessed following the trial. This will affect the further planning and scaling of hydrogen use.

**In 2024, V-ZUG further electrified its operating fleet.** The company is expanding its fleet to a total of 39 electric service vehicles by the end of 2025. Installing charging stations for the electric service vehicles at home remains a logistical challenge. Furthermore, no electric vehicles with a 4x4 drive exist, but these vehicles are required in mountainous areas. On the other hand, V-ZUG acquired a second electric lorry with funds from the CO<sub>2</sub> fund in the reporting year.

In 2024, the CO<sub>2</sub> fund also made it possible to launch the “Circular materials” project, which pledged CHF 135,000 annually for a period of two years. The project examines how the circularity of the materials used can be optimised. With these measures, V-ZUG will further reduce Scope 3 emissions.

### V-ZUG optimises operational waste management

Environmental management at the Zug site is certified in accordance with ISO 14001. As part of the site transformation, V-ZUG developed a new waste management concept that is tailored to the new vertical production. The concept defines how the collected valuables are optimally sorted and waste streams are reorganised. In contrast to the previous approach, V-ZUG will dispose of the generated waste materials in the future through external waste disposal service providers, independent of the Tech Cluster Zug. In this way, V-ZUG is responsible for operational waste management in accordance with the recycling strategy in the spirit of the circular economy.

### The “V-Forest” continues to grow

At present, despite all efforts, V-ZUG cannot fully eliminate CO<sub>2</sub> emissions. In 2020, the company partnered with the **Ripa Gar Foundation** in support of the “V-Forest” reforestation project in Scotland. V-ZUG’s compensation contributions are added to the reforestation of the forest. V-ZUG offsets all remaining Scope 1 and Scope 2 emissions as well as Scope 3 emissions from business flights. As a result, V-ZUG is able to offer its customers appliances from carbon-neutral production. Every year, additional sections of forest are planted in the

reforestation project: in 2024, the foundation integrated over 100,000 trees as regional seedlings of Scottish mixed forests into the existing stock, thereby reforesting approximately 70 hectares.

The “V-Forest” also includes contributions from customers voluntarily offsetting the CO<sub>2</sub> emissions caused by their appliance use via the global **CO<sub>2</sub> web shop**. This takes into account the respective load current of the country. The **CO<sub>2</sub> web shop** is a further measure, which V-ZUG uses to address downstream Scope 3 emissions.

### SBTi climate targets and TCFD report

In the reporting year, V-ZUG submitted its short-term climate targets for the period 2020–2030 to the Science Based Targets Initiative (SBTi). By 2030, V-ZUG aims to reduce Scope 1 and Scope 2 emissions by 80 % and Scope 3 emissions by 30 %. In doing so, V-ZUG is pursuing a significantly greater CO<sub>2</sub> reduction in Scope 1 and Scope 2 than the 42 % prescribed by SBTi. Due to the high dependencies in the case of Scope 3 emissions, V-ZUG has intentionally not submitted a long-term net-zero target for 2050 as defined by SBTi. Detailed information on this can be found in the climate report.

For the 2024 financial year, V-ZUG is reporting in line with the rules of the Taskforce on Climate-Related Financial Disclosures (TCFD) for the second time. The report provides a holistic view of climate risks and contains updated information, as well as developments in governance, strategy, risk management, and targets and metrics ([TCFD](#)).



## Targets, facts and figures

Targets	Baseline and target years	Status
<b>CO<sub>2</sub> emissions</b>		
To be carbon-neutral at all production sites in Scope 1 and 2 (incl. offsetting)	Annual review	Achieved (since 2020)
To reduce the remaining Scope 1 and 2 emissions by 80 % (long-term ambition: 100 %)	2020; 2030	On track
To have transparency regarding our Scope 3 emissions	n.a.; 2021	Achieved (since 2021)
To reduce Scope 3 emissions by 30 %	2020; 2030	On track
<b>Environment and waste</b>		
To continuously reduce the amount of waste through targeted initiatives and by optimising disposal methods. For years, we have not disposed of any waste in landfill sites, and we are maintaining this approach.	2020; 2030	On track
To reduce the relative impact on the environment continuously and increase ecological efficiency by at least 40 % by 2030 (ecological efficiency: environmental impact relative to net sales)	2020; 2030	On track

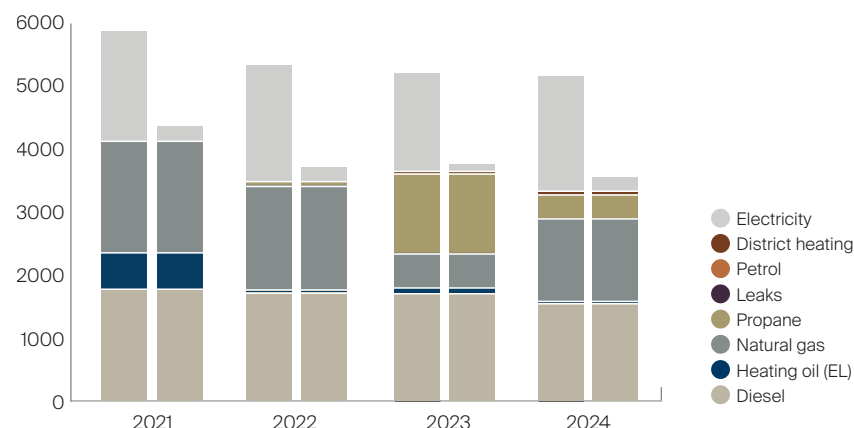
Targets, results and status in relation to the focus topic “Environment and climate protection” (abbreviated; details in the appendix to the Sustainability Report)  
Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

### Contribution to SDGs 7, 9, 12 and 13



Climate change, environmental impact and biodiversity loss require decarbonisation throughout all of society. V-ZUG is taking various measures: The “Multi Energy Hub” power supply system reduces the environmental impact. The vertical mode of production takes up less ground area. The share of renewable energy used at the Zug and Sulgen sites is rising continuously. In order to increase energy and resource efficiency in the manufacture of appliances, V-ZUG uses optimised production facilities. An internal CO<sub>2</sub> levy enables investments in favour of sustainability. Remaining CO<sub>2</sub> emissions are offset by the “V-Forest” reforestation project. This growing forest is removing CO<sub>2</sub> from the atmosphere and sequestering it for the long term. At the same time, it is promoting local biodiversity.

### CO<sub>2</sub> emissions (Scope 1 and 2) in t



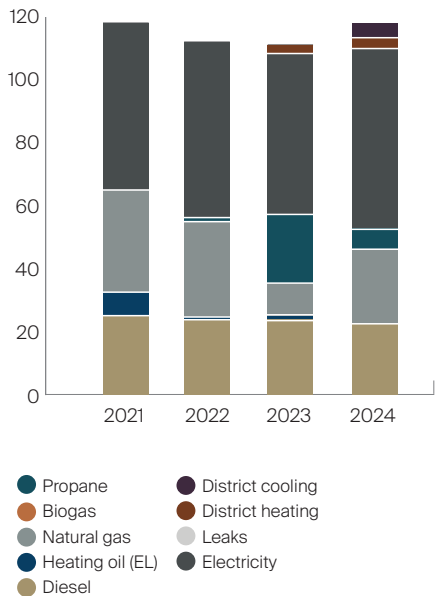
### Scope 1 and Scope 2 emissions decreased by 5.4 %

Thanks to ongoing transformation at the Zug site, emissions fell by 5.4 % in the reporting year (total of 3,541 t CO<sub>2</sub>). The expansion of the Multi Energy Hub (MEH) at the Zug site is progressing. During the reporting year, however, various areas were still running in duplicate (transformation). In addition, the existing buildings will no longer be connected to the MEH, as they will be demolished by 2030 and replaced by new buildings. The gradual decarbonisation of the V-ZUG vehicle fleet (trucks and service vehicles) contributes positively to the reduction, as well as the reduction of propane gas in Zug, which was completely discontinued in September.

We are now showing the emissions generated by purchased electricity (Scope 2) twice: once as market-based (right-hand bar; procurement of renewable power, 100 % Swiss hydropower for Zug and Sulgen), and once as location-based (left-hand bar, emissions of power obtained at sites). This serves to provide transparency and comparability for the emissions generated from power consumption.

Scope 3 emissions (eleven relevant categories) can be seen in the accompanying [GRI index](#).

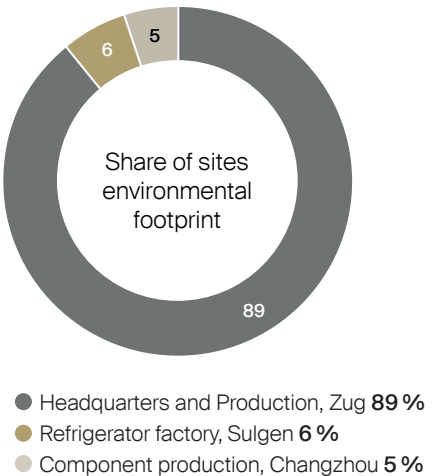
Energy consumption at V-ZUG by energy source (in terajoules)



Absolute energy consumption increased, emissions reduced

In 2024, the absolute energy consumed by V-ZUG was 114.38 terajoules. This is composed as follows: Electricity (48.46%), district heating (3.03%), district cooling (3.76%), natural gas (20.59%), biogas (0.07%), heating oil (0.10%), propane gas (5.64%) and diesel (18.35%) for our vehicle fleet. Compared to 2023, energy consumption increased by 6.18%. Despite increased consumption, Scope 1 and Scope 2 emissions were reduced by 5.4% thanks to an optimised energy mix.

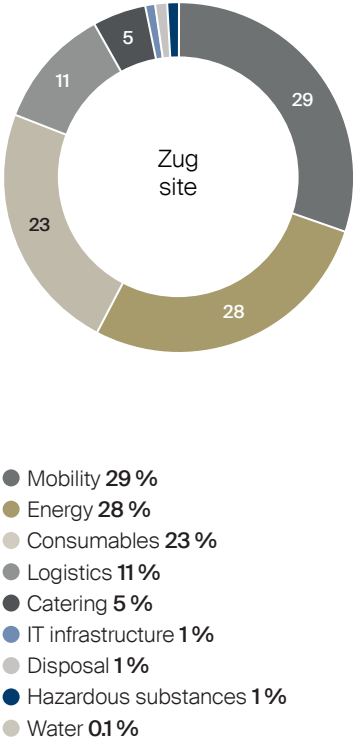
Percentage share of sites in the overall environmental footprint



Environmental footprint in ecopoints (EPs)

In addition to the product life cycle assessments, we also perform business life cycle assessments for our three production sites. We use these facts to achieve a targeted reduction and calculate the environmental efficiency (environmental impact relative to net sales). The figure above shows the percentage share of sites in the overall environmental footprint. The figure on the right shows the detailed breakdown for the headquarters in Zug.

Operational life cycle assessment for Zug site (headquarters), 2024



Categories and subcategories	EPs	(mPt)	Shares of the subcategories
<b>Energy</b>	<b>3,755</b>	<b>(28 %)</b>	
Heating			76.4%
Electricity			23.5%
Cooling			0%
<b>Hazardous substances</b>	<b>131</b>	<b>(1%)</b>	
Hazardous substances			3.5%
<b>IT infrastructure</b>	<b>128</b>	<b>(1%)</b>	
Desktop			1.1%
Laptop			1.0%
Monitors			1.3%
<b>Logistics</b>	<b>1,450</b>	<b>(11%)</b>	
Internal trucks			38.6%
<b>Mobility</b>	<b>3,975</b>	<b>(29 %)</b>	
Business travel			16.9%
Service			88.9%
<b>Consumables</b>	<b>3,129</b>	<b>(23 %)</b>	
Paper			10.1%
Packaging			73.2%
<b>Catering</b>	<b>721</b>	<b>(5 %)</b>	
Food			13.1%
Drinks			6.1%
<b>Water</b>	<b>16</b>	<b>(0.12 %)</b>	
Freshwater			0.4%
<b>Disposal</b>	<b>194</b>	<b>(1%)</b>	
Wastewater			0.5%
Composted			0.0%
Recycled			0.0%
Hazardous waste / chemicals in general			4.2%
Incinerated			0.5%
<b>Total</b>	<b>13,500</b>		



# Entrepreneurship for sustainable prosperity

**V-ZUG strives for sustainable performance, while also having a positive impact on the common good and the environment. The company is committed to Switzerland as a business location and is driving the transformation in Zug. V-ZUG tests innovative ideas and business models and facilitates partnerships to benefit the circular economy. Suppliers must also comply with high social and environmental standards. Legally compliant business activities are a prerequisite for keeping the company's reputation intact.**

## Future-oriented site

V-ZUG is convinced of the future viability and economic advantages of its Swiss production sites. The well-trained specialists are driving innovation within the company. The company's long-term success ensures local jobs and further sustainability efforts.

With the site transformation, V-ZUG is investing in its own productivity and efficiency as well as the general attractiveness of Zug. In collaboration with the **Tech Cluster Zug** and other partners, flagship projects are being implemented in the areas of housing, construction, work and mobility. When planning and implementing these projects, ecological aspects are prioritised. As in previous years, V-ZUG invested around CHF 50 million in modernising its production lines and buildings in 2024. During the reporting year, many production lines were relocated to the premises of the newly established production building "Zephyr Ost". The new production buildings "Mistral", "Zephyr Hangar", "Zephyr East", and the existing "ZUGgate" high-bay warehouse comprise the now finalised V-ZUG vertical factory and cover all of the company's production areas. In 2024, the tender for the last new building, the "Zephyr West" office building, was also launched and completed. Construction is expected to be completed in 2027. With the completion of "Zephyr Ost", V-ZUG has invested over CHF 300 million in the Swiss facilities over the last eight years. The modern infrastructure enables efficient production and ensures jobs in Switzerland over the long term.

## Responsible management

Compliance violations, unethical conduct and unfair advertising or anti-competitive business practices may harm the reputation of V-ZUG and thus jeopardise its success. V-ZUG Group's Code of Conduct and the anti-corruption regulations stipulate the ethical standards that all

business activities must follow. It is based on corporate values, applicable laws, the UN General Declaration of Human Rights as well as internal policies. It is binding for all V-ZUG Group employees and is part of the employment contract. Compliance audits are performed to ensure that the code is properly implemented. In 2024, employees completed a mandatory training course on the Code of Conduct using an e-learning platform. Any non-compliance must be reported to line management, the internal legal department or, for serious grievances, to the external reporting point of Stiftung Krisenintervention Schweiz (the Swiss Crisis Intervention Foundation). Employees who make a report in good faith need not fear that this will have any negative repercussions for their employment at the company. In 2024, six reports were received.

## IT security and data protection

The protection of our customers' privacy and data rights is enshrined in the Code of Conduct and in the V-ZUG privacy statement. With the increasing number of household appliances being connected, relevant data protection laws must be observed. In addition, robust IT security systems protect the company from cyber risks and potential production failures.

The Chief Technology Officer (CTO) is responsible for IT and security strategy for the entire V-ZUG Group. He is in charge of the Head of IT and the ICT Security department, which implement the strategy with concrete measures. The Cybersecurity Committee regularly analyses the risk landscape. The ICT infrastructure is monitored around the clock by external specialists. The Head of the Legal department is responsible for compliance with national and international data protection laws.

The V-ZUG security system is based on international standards. Annual security audits are conducted to identify vulnerabilities and initiate improvements. Employees are made aware of ICT security and data protection issues through phishing tests. Internal policies govern the handling of telecommunications equipment, data and confidential information.



## Efficient supply chain management

Given the regulatory situation, supplier management is becoming increasingly important. Business due diligence obligations are implemented transparently and can thus have a positive effect on working conditions in the supply chain and on the natural environment (see [DDTrO Report](#)). This prevents reputational damage.

V-ZUG has continuously expanded supplier management in recent years. Since 2024, the Code of Conduct for Suppliers has been an integral part of the General Terms and Conditions and therefore of all of V-ZUG's supplier contracts. It is based on international standards, in particular the OECD Guidelines for Multinational Enterprises, the core conventions of the International Labour Organization and the UN Global Compact. In addition, an internal procurement manual was issued in 2024. Among other things, it supports the enforcement of the Code of Conduct for Suppliers and clarifies internal responsibilities. In the reporting year, all Procurement department employees received training on the new handbook. The "Tacto" procurement system was also introduced, which includes the previous risk management tools "Sphera" and "Integrity Next". Global real-time information continuously monitors the ESG and compliance performance of key suppliers. The integrated system allows for transparent and efficient supplier management. Supply difficulties, quality reductions and financial losses can be prevented. Potential human rights risks or environmental risks in supply chains can be identified and proactively addressed.

V-ZUG reserves the right to carry out audits at its suppliers' premises, particularly in the event of a reasonable suspicion of violations of the cited standards. Obvious or suspected breaches must be reported to the Compliance department. In the reporting year, 83 supplier audits were carried out. No suppliers were excluded due to increased risk.

## Sustainable procurement

V-ZUG favours suppliers who pay attention to the energy and resource efficiency as well as the circularity of their products and services. Geographical proximity is also an advantage because having shorter transport routes reduces emissions. Around 60 % of V-ZUG's suppliers are based in Switzerland, and another 30 % or so are located in nearby European countries. Electronic components are primarily sourced from Asia. V-ZUG has a zero-tolerance attitude towards forced labour and child labour. Fair working conditions and wages as well as high occupational safety standards are equally important. Suppliers certified by independent organisations with a high degree of transparency are prioritised. New suppliers must submit a self-assessment, disclose financial information and, if necessary, undergo a pre-audit. Sustainability criteria are systematically taken into account in this process.

V-ZUG focuses on long-term, partnership-based supplier relationships. Collaboration is key for competitiveness as well as for circular innovations. When selecting new suppliers, a willingness to innovate is a prerequisite for cooperation. During the reporting year, V-ZUG expanded its partnership with Outokumpu, a green steel producer, and engaged with other providers. Thanks to the latest market developments, suppliers of low-carbon steel have already achieved economies of scale, which lowers procurement costs for V-ZUG.

## Social commitment to greater sustainability

V-ZUG is committed to sustainable development in a variety of ways. As a member of associations, V-ZUG actively provides impetus and participates in cross-sector exchange. This can, in turn, lead to new partnerships. In the reporting year, V-ZUG joined the Swisscleantech business association. In addition, the CEO of V-ZUG is represented on the Board of Trustees of the Swiss Foundation for the Recycling of Electrical and Electronic Appliances (SENS) as well as on the Board of Directors of the Electrical Appliances Trade Association (FEA). Moreover, V-ZUG is a co-founder of the [Association for the Decarbonization of Industry](#), which was initiated by the [Tech Cluster Zug](#).

In order to drive innovation, V-ZUG regularly works with Swiss universities. Since 2024, the company has partnered in implementing the Circulus project, led by the Zurich University of Applied Science (ZHAW) and funded by Innosuisse. The project will show concrete steps on how the machinery, electrical and metal industries in Switzerland can be transformed into circular industries. The "V-ZUG Exploration Lab" was also launched in 2024: rotating teams from V-ZUG test new ideas with students from ETH Zurich, for example, in the area of business models.

V-ZUG sponsors select civil society and sporting events (see "Our engagements"). Since 2022, it has been the main partner of "Lucerne Dialogue", a leading European economic conference. Every year, young V-ZUG employees participate in the conference and expand their perspective.

Lastly, the V-ZUG pension fund is pursuing a sustainable strategy of investment. The assets of around CHF 800 million are managed in accordance with ESG criteria, including investments in future-fit business areas – an added value for society as a whole.

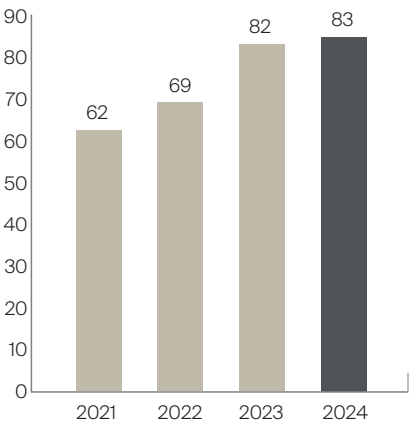
Targets, facts and figures

Targets	Baseline and target years	Status
To generate a significant two-digit EBIT margin in the medium term (10–13%), in order to be able to invest sustainably and thereby maintain our future viability	Annual review	Not achieved
To achieve organic sales growth of 3%	Annual review	Not achieved
To have audited all our key suppliers (covering at least 80 % of our sales volume) in line with sustainability criteria	n.a.; 2025	On track
To account for one core element per product category, with a transparent supply chain down to the lowest possible level	n.a.; 2025	On track

Targets, results and status in relation to the focus topic “Entrepreneurship for sustainable prosperity” (abbreviated; full details in the appendix to the Sustainability Report)

Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

Number of supplier audits involving social and environmental criteria



Supplier audits up 1.2 %

In the reporting year 2024, we were able to conduct 83 supplier audits on site. This shows how important it is to V-ZUG for suppliers to meet its high requirements in terms of quality and sustainability.

Contribution to SDGs 8, 9 and 12



Excellence and innovation play a key role in making our company future-fit. In order to secure this, V-ZUG enters into external partnerships. The company also invests in a modern, resource-efficient production facility. At its sites, the company develops more sustainable infrastructure in tandem with local stakeholders in order to be able to operate more efficiently and for the benefit of society, the economy and the environment. V-ZUG offers attractive industrial jobs and supports local businesses by procuring goods and services from local sources. Along with its partners, the company works to promote the implementation of environmental and social standards throughout the supply chain and highly values long-term supplier relationships.

# Appendix to the report on non-financial matters

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# About non-financial reporting

This report on non-financial matters is included as an integral part of the 2024 Annual Report of V-ZUG Holding AG. It focuses on the non-financial reporting of V-ZUG Holding AG. It is also available for download as a standalone report on the V-ZUG website. The report on non-financial matters covers the significant economic, environmental and social impacts, risks and opportunities of the three production sites of V-ZUG Holding AG (V-ZUG Group): V-ZUG AG, headquartered in Zug, V-ZUG Kühltechnik AG based in Sulgen, as well as the foreign subsidiary V-ZUG (Changzhou) Special Components Co. Ltd., which is based west of Shanghai. Details which do not pertain to the organisational units above are indicated specifically (e.g. Group-wide or specific to the Swiss market).

V-ZUG Holding AG reports in line with the GRI Standards (2021) for the period from 1 January 2024 to 31 December 2024 and in accordance with the regulatory requirements for non-financial reporting in Switzerland (Article 964a et seq. CO). The full report on non-financial matters, together with the Annual Report, was approved and signed by the Board of Directors on 4 March 2025.

The previous report on non-financial matters was published in spring 2024, covering the period from 1 January 2023 to 31 December 2023.

The four sections “Products and services for a future-fit society”, “Resilient and committed employees”, “Environment and climate protection” and “Entrepreneurship for sustainable prosperity” reflect the strategic focus topics of V-ZUG and describe the impacts, risks, opportunities, management approaches and campaigns, strategic objectives and KPIs associated with the material sustainability topics (materiality matrix). V-ZUG updated the materiality matrix in 2024 using the method of double materiality required by the EU ESRS standards (section “Sustainability as part of the strategy”).

A total of 1,741 FTE employees (excluding temporary employees) are included within the scope of the report, including the key figures for 2021 to 2024. This equates to 84% of the total number of V-ZUG Group employees, which, on 31 December 2024, amounted to 2,064 FTEs (including temporary employees).

This report represents and addresses all genders and favours inclusive wording.

V-ZUG is publishing a non-financial report for the twelfth time. In doing so, V-ZUG is striving to present progress and challenges in terms of its commitment to sustainability in a transparent, comprehensible and verifiable manner. Any questions and feedback may be sent to [marcel.niederberger@vzug.com](mailto:marcel.niederberger@vzug.com)

# Material topics: Impacts, risks and opportunities (IROs)

## Focus topic: Products and services for a future-fit society

### Issue 1: Durable and circular product design

V-ZUG sees circularity as a holistic concept, which includes the product from the early stage of development to its end of life and takes into account the following aspects:

- Enabling transformation from the recycling economy to the circular economy
- Quality, longevity, durability and aesthetics
- Promoting repairability, including sustainable spare parts management and service fleet
- Sustainable use of materials, e.g. recycled materials, environmentally friendly and degradable materials; reducing hazardous materials; reducing material intensity and using electronics consciously
- Modularisation/upgradeability and retrofitting capability: This relates to standardising the parts used across different products and product variants, and the possibility of modernising products with specific components
- Enabling reuse
- Making products easier to recycle and less costly to dismantle
- End of life: Refurbishment and resale, or dismantling appliances with the reuse, recycling, re-circulation and re-purposing of components
- Paying attention to primary packaging in direct contact with the product (e.g. appliance packaging)
- This material topic has a major impact on upstream CO<sub>2</sub> emissions (Scope 3) from category 3.1 “Purchased goods and services”

#### Actual and potential positive or negative impacts:

+	Actual	Reduced strain on natural resources through circular product design and durable products
+	Potential	Influence on material innovations for the materials used and primary packaging (development, commercial viability, etc.)
+	Potential	Influence on competitors/market and other stakeholders (e.g. recycling partners) for enhanced sustainability (specifically circularity) by being a role model/driver of innovation

#### Risks:

- High investments, e.g. in circular product developments (green design guidelines), adjustments in the production process and infrastructure
- Commercially non-viable circularity innovations
- Complex transition phase due to increasingly complex value chains
- Dependencies on circular partners, such as recyclers, suppliers, customers, or lack of options (single source)
- Complex transition phase due to increasingly complex value chains

#### Opportunities:

- Developing new products and services compatible with the circular economy in line with customer demand
- Tapping into new target groups through alternative/circular business models
- Customer acquisition and customer satisfaction thanks to responsible product design according to the principles of the circular economy
- Improving resilience by reducing the dependence on procurement markets

## Issue 2: Energy-efficient design and environmentally responsible use

V-ZUG assumes responsibility from the design to the use of the appliances in the home and considers the following aspects in this context:

- Energy-efficient design (programs, functionalities, efficient components, stand-by consumption, amount of electronics, etc.)
- Integrating functions to enable products to be used ecologically: Users can use the appliances in a simple and environmentally friendly manner.
- Provision of comprehensive information for ecological use (tips, tricks, energy suppliers, energy and emissions, etc.): The users are aware of the options for resource-efficient use of the appliances and make use of them (awareness-raising and educational efforts, e.g. using the ecological function).
- Water efficiency and the use of washing detergents are also considered; however, this aspect is weighted less, as all appliances require electrical energy, but only some of the appliances (washing machines and dishwashers) need water and washing detergents.
- This material topic has a major impact on downstream CO<sub>2</sub> emissions (Scope 3) from category 3.11 “Use of sold products”.

### Actual and potential positive or negative impacts:

– Actual	Environmental impact and energy consumption from appliances used in the home
+ Actual	Reduction of environmental impact through more energy-efficient appliances
+ Actual	Cost savings for customers thanks to lower energy consumption
+ Potential	Contribution to the security of energy supply thanks to reduced energy demand with efficient appliances
+ Potential	Influence on competitors/market and other stakeholders to the benefit of sustainability (specifically energy efficiency) by being a role model/driver of innovation
+ Potential	Protection of the environment through conscious use of appliances thanks to awareness-raising about products and services (e.g. ecological programs/non-use of certain functions such as dryer)

### Risks:

- Major investments to develop ecological functions that customers do not use or only use infrequently

### Opportunities:

- Competitive advantage through differentiation/leading role with energy-efficient appliances (particularly important with higher energy prices)
- Exploiting the opportunities of digitalisation that promote ecological/energy-efficient behaviour among users (nudging, gamification and networked appliances)

### Issue 3: Innovations which benefit customers

V-ZUG is constantly working on innovations that meet the needs of customers while generating positive ecological, social and economic added value:

- Developing innovative products and services that create added value for customers (simple use, time savings in the household, enjoyment, design, etc.) and are successful on the market.
- Differentiation from competitors through innovation and increasing net sales.
- Developing innovative, environmentally friendly functions and programs as well as responsible use of resources.
- Innovative business models with sustainable added value: Offering new services, such as trading in used appliances, refurbishment, "Product as a Service", food products, renewable energy supplier, service including repairs, second life spare parts, CO<sub>2</sub> compensation in use, "Shared Economy", etc.
- Inspiration through innovation: Promoting a sustainable lifestyle and healthy nutrition, e.g. V-Kitchen with innovative recipes, etc.
- Digitalisation and networking of household appliances and offering innovative functions.

**Actual and potential positive or negative impacts:**

- |                                   |  |
|-----------------------------------|--|
| <div>+</div> <div>Actual</div>    | <div>More high-quality, innovative appliances on the market with a higher lifespan and lower consumption for a smaller environmental footprint</div> |
| <div>+</div> <div>Potential</div> | <div>Positive perception of innovative quality products spreads to other categories of consumption to promote sustainability in general</div>        |

**Risks:**

- **Commercially non-viable innovations or business models that do not appeal to customers**
- Customers do not network their household appliances, which keeps them from generating full added value

**Opportunities:**









- **Competitive advantage thanks to beneficial innovations as well as clear positioning and reputation building leads to higher net sales**

Issue 4: Customer satisfaction

V-ZUG strives to guarantee full customer satisfaction and considers the following aspects in this context:

- Ensuring a positive customer experience throughout the entire customer journey – from the time of interest to use and further recommendation.
- Awareness: Sparking interest, strengthening brand perception, communication, engagement, etc.
- Consideration: Ensuring interest through information procurement, comprehensive information from V-ZUG and extensive advice from our resellers (wholesale, kitchen builders and online), training for resellers and trade fairs.
- Purchase: Purchase decision for the right appliances with the right functions, for the right use in relation to the customer requirement (incl. sufficiency: do I really need a dryer?).
- Installation: Proper installation of the appliances to ensure longevity and product safety (ventilation slits, ergonomics, etc.).
- Requiring the training of installers and fair working conditions.
- Retention:
  - Use and service: positive product experience in use, supporting environmentally friendly user behaviour, first-class services (repair service, response time, repair time and repairability), cooking classes, product demonstration and training of external service teams, etc.
  - Sustainable lifestyle and healthy nutrition: Our products are designed to support users in their efforts to eat in a healthy and environmentally friendly manner, to minimise food waste (animal welfare, sustainable and healthy recipes and inspiration) and to gently wash clothing, thereby increasing its lifespan. This includes maintaining social contacts, acting as host, inviting friends, etc.
- Advocacy: Satisfied and enthusiastic customers help to ensure further recommendations and/or sales

Actual and potential positive or negative impacts:

	Actual	High customer satisfaction thanks to excellent quality, functionality and design of products and services
	Actual	Increased awareness (e.g. for the environment and health) and informed customers thanks to transparent and helpful communication
	Actual	Physical safety of users through safe appliances, professional technical service and transparent communication (e.g. instructions for use)
	Actual	Longer appliance lifespan thanks to professional and correct installation
	Potential	Lower environmental impact thanks to information and communication on the resource-efficient use of the appliances (less electricity, fewer repairs and less material)
	Potential	Increasing environmentally conscious purchase decisions by customers through targeted information and communication in downstream channels by V-ZUG and third parties (online shops, kitchen builders, wholesalers and service companies, etc.)
	Potential	Contribution to improved user health through information, tips and services for more sustainable/healthier lifestyle and less food waste (e.g. V-Kitchen)
	Potential	Contribution to reasonable/better working hours (due to higher social requirements and audits, etc.) among third parties (e.g. installers)

Risks:

- Ineffective efforts/investments due to low use of the offer by users (e.g. V-Kitchen)
- Insufficient/incorrect information provided by third parties to customers regarding products and services (e.g. sellers/installers)
- End customers perceive sustainability efforts as patronising (e.g. V-Kitchen and the V-ZUG Home app), leading to less sales/move to competition

Opportunities:

- Competitive advantage through positive customer experiences and high customer satisfaction lead to recommendations/further purchases while also boosting net sales
- Positive influence in favour of more sustainable purchase and consumption decisions thanks to information and transparency in communication
- Strengthening general market opportunities/acceptance of circular products and business models (PaaS and second hand)
- Competitive advantage and reputation building among end customers thanks to exemplary positioning in environmental and health topics



Focus topic: Resilient and committed employees

Issue 5: Health and safety of employees

V-ZUG bears responsibility for the health and safety of employees in the workplace. We consider the following aspects in this context:

- Mental and physical health: This includes both preventative and accompanying measures for daily work together in dealing with changes that contribute to health in the workplace (in the office or at home) as well as a healthy lifestyle during leisure time. We consider one important factor of this to be personal resilience and measures that promote it.
- Health and safety culture: This is about establishing and implementing a culture of health and safety within the company. Key influential methods include HR management and communication.
- Raising employee awareness through internal initiatives in the areas of sustainable lifestyle and healthy nutrition, climate awareness, social commitment, mobility, consumption, travel, etc.
- Occupational safety and workplace conditions: Employees should be safe in the workplace. This is about safe workplaces in areas such as production and suitable occupational safety measures, such as protective clothing. Having healthy workplace conditions means setting up all workplaces to make them as conducive to health as possible – e.g. in terms of ergonomics, noise emissions or temperatures.
- Reintegration of people with disabilities: Employees with long-term health impairments are supported when reintegrating into the workplace.

Actual and potential positive or negative impacts:		
+	Actual	Influence on employee well-being and satisfaction through regulated and fair working hours
+	Actual	Influence on work-life balance through flexible working models
+	Actual	Influence on the health and productivity of employees through occupational health and safety
+	Actual	A humane work environment free from child labour through zero-tolerance policy and measures (audits, etc.)
+	Actual	Maintaining employee privacy
+	Actual	Influence on satisfaction and long-term employment relationships through adequate wages
-	Actual	Strain on the health and social security system (including health costs) due to accidents and/or insufficient occupational safety measures
+	Potential	Influence on employee health and well-being through awareness campaigns (with potential impact on their personal environment)
+	Potential	Added value for the company through satisfied and efficient employees as constructive citizens

Risks:

- Climate-related extreme weather affects the health and productivity of employees (costs of absences/adaptation costs)
- Financial losses due to occupational safety breaches by employees

Opportunities:

- High level of employee loyalty through secure and attractive working conditions
- Boosting employer attractiveness through modern and flexible working structures (Employer Branding)
- Increased productivity through effective and resilient employees thanks to occupational health management and other initiatives
- Lower costs of absences thanks to effective safety precautions and occupational safety concepts
- Increased productivity through digital/hybrid work opportunities

### Issue 6: Developing potential and managing expertise

V-ZUG strengthens the employability of its employees, supports its managers, ensures internal knowledge transfer and positions itself to attract new talent.

- **Employability:** By this, we mean the employability of our staff, which is meant to be enhanced and maintained. Development measures may vary depending on their age, profession and potential.
- **Education and training:** This concerns the technical, methodological and social development of employees, as well as training positions such as apprenticeships and internships.
- **Career development and succession planning:** Employees should have the opportunity for advancement. Career development enables prospects to be highlighted and the associated development to be fostered. This also includes internal succession planning for key personnel and functions.
- **Identification, promotion and use of potential:** It is key to use potential successfully. This motivates personnel and leads to a high level of commitment
- **Expertise management:** This is about how to retain employee expertise within the company and make it accessible to all employees.
- **Engagement:** The active involvement of employees in the organisation of the company as well as a proactive feedback and input culture (including the employee survey) fosters employee loyalty, satisfaction and productivity.
- **Successful targeted recruitment:** This aspect describes how and whether we succeed in finding and recruiting the right employees.
- **Targeted retention management:** Targeted retention management and the avoidance of unwanted fluctuation optimises social and corporate responsibility.

**Actual and potential positive or negative impacts:**

<div><div></div><div></div><div></div></div>	Actual	Promoting employability and thus the ability of employees to independently and sustainably secure their economic well-being (job security and prosperity)
<div><div></div><div></div><div></div></div>	Actual	Influence on the well-being and satisfaction of employees through secure jobs
<div><div></div><div></div><div></div></div>	Actual	Contribution to the Swiss skilled labour market through highly trained employees (e.g. with training)
<div><div></div><div></div><div></div></div>	Potential	Influence on standards relating to employer attractiveness and the promotion of employees on the labour market through the function as a role model (Employer Reputation)

**Risks:**

- **Loss of expertise and innovative capacity/competitiveness due to unwanted staff turnover (high potentials leave and low potentials remain)**
- **A shortage of skilled workers leads to a lack of expertise and poor competitiveness**

**Opportunities:**

- **Strong motivation and commitment of employees by supporting potential (function and prospects) with positive consequences for employee productivity and retention**
- **Increased innovation through highly trained employees**
- **Securing expertise in the long term through prudent succession planning**

## Issue 7: Diverse and inclusive working culture

V-ZUG promotes a diverse and inclusive working culture and considers the following aspects in this context:

- Equality: This refers to equal opportunities and equal treatment, for example in terms of pay or career opportunities.
- Supporting diversity and an inclusive culture of collaboration: Topics such as respect, openness, tolerance and mutual appreciation are key, for example when integrating people with asylum or migration in their background, people with disabilities, etc.
- Ban on discrimination: This aspect of risk relates to how discrimination is prevented and how possible incidents are handled in the company.
- Flexible working: This means working independently of time or place, and how the company deals with the many opportunities and risks associated with flexible working.
- Forms of work: Forms of work that promote the diverse and inclusive work culture, e.g. part-time work, job sharing, co-management or interdisciplinary collaboration.
- Reputation: The image and role-model function of V-ZUG as well as opportunities for talent acquisition and retention (Employer Branding). Potential risks arise, for example, when errors are made in communication or diversity targets are missed.
- Increased innovation and customer-oriented products thanks to diverse teams.

### Actual and potential positive or negative impacts:

<div></div> Actual	<b>Economic security for employees (job security and prosperity) thanks to long-term employment across different phases of life</b>
<div></div> Actual	<b>Contribution to equal prosperity for female and male employees by ensuring equal pay</b>
<div></div> Actual	<b>Contribution to equal development of potential for all employees through training and education opportunities</b>
<div></div> Actual	<b>Fair working conditions with equality of opportunity and recruitment free from discrimination</b>
<div></div> Actual	Inclusion of people with disabilities through the creation of job opportunities
<div></div> Actual	Contribution to gender equality through targeted measures for women in the company
<div></div> Potential	<b>Respectful, open and non-discriminatory working culture/working environment thanks to awareness campaigns (e.g. awareness of gender issues, LGBTQI, etc.)</b>
<div></div> Potential	Establishing the standard of gender equality and equal pay in the industry or sector and in wider society through the function as a role model
<div></div> Potential	Prevention of serious problems (violence, discrimination, sexual harassment and bullying) in the workforce thanks to preventive activities and a reporting point
<div></div> Potential	Contribution to mitigating the shortage of skilled workers through inclusive teams
<div></div> Potential	Positive contribution to social inclusion and equal opportunities for society and the economy as a whole through the function as a role model

### Risks:

- Loss of reputation and image in the event of failure or misleading communication (“pinkwashing”) with respect to D&I topics and missed diversity targets
- Frictions and challenges in managing diverse teams
- Lack of credibility or reluctance in relation to D&I measures among employees

### Opportunities:

- Talent acquisition and retention through open and inclusive work culture (employer branding)
- Increased innovation and creativity thanks to diversity in teams
- Higher sales and/or better products and high levels of customer satisfaction thanks to an increased understanding of customer expectations through an inclusive workforce (inclusion of different perspectives)

# Focus topic: Environment and climate protection

## Issue 8: Resource-efficient sites (operations)

For V-ZUG, this includes the following aspects:

- Energy management: This relates to the energy mix used and the investments made in renewable energy (e.g. photovoltaic).
- Energy-efficient production: This relates to the energy consumption of machinery, plants and processes, as well as analysing and optimising this.
- Reducing greenhouse gas emissions: This has to do with the greenhouse gases emitted from sources within the company, such as the vehicle fleet, heating, process gas (Scope 1) and emissions from electricity and district heating (Scope 2).
- This has to do with the efficient use of water as a resource as well as the environmental compatibility of its withdrawal, consumption and discharge.
- Resource-efficient production facilities: This concerns the lifespan and resource efficiency of the production facilities.
- Structural ecology: This has to do with the use of building materials such as concrete or timber, and adherence to sustainability standards for construction. This also includes the energy consumption of buildings.
- Responsible handling of hazardous substances.

### Actual and potential positive or negative impacts:

+	Actual	Reduction of environmental impact through innovations in energy supply (e.g. Multi Energy Hub)
-	Actual	Environmental pollution from emissions (through production and operations)
-	Actual	Energy consumption for the production and distribution of appliances
-	Actual	Air pollution from production-related emissions
-	Actual	Pollution of water quality through production-related processes
-	Actual	Soil pollution through production-related processes
-	Actual	Water consumption through production-related processes
+	Potential	Contribution to the net-zero target by 2050 through new technologies (e.g. negative emission technologies NET)
+	Potential	Collaborative exploration of alternative energies for the benefit of the industry (Association for the Decarbonisation of Industry)

### Risks:

- Higher costs due to stricter environmental regulations (e.g. CO<sub>2</sub> tax for companies)
- Security of energy supply (cost and availability, e.g. electricity and natural gas)
- Comparatively high investment costs for more ecological buildings and energy supply systems
- Operational disruptions in the transition (e.g. production lines)
- Fines and/or legal proceedings for environmental damage and/or mishaps

### Opportunities:

- Reducing costs due to lower material requirements and energy consumption
- Strategic differentiation through ambitious and innovative measures as well as pioneering role (e.g. internal CO<sub>2</sub> fund)

### Issue 9: Operational waste management

Waste management at V-ZUG comprises the following aspects:

- Management of various waste categories:
  - Production waste (metal, plastic, hazardous waste, etc.)
  - Operational waste (office materials, food, electronics, etc.)
  - Secondary packaging (wooden pallets, cardboard, film, polystyrene, etc.)
  - Noise
  - Waste water
  - Exhaust and odour
- Measures to reduce waste, in particular waste that cannot be reused or recycled.
- Waste collection and declaration
- Proper disposal and optimisation of the types of disposal (reuse, recycling, composting, incineration, etc.)
- Proper disposal of waste that cannot be reused (oil, hazardous substances, etc.)

**Actual and potential positive or negative impacts:**

+	Actual	Reduction of waste (resource consumption) through material innovation, product design, partnerships, manufacturing and demanufacturing processes
-	Actual	Generation of waste through production and building management

**Risks:**

- Financial investments for transition (new facilities/equipment for waste disposal, e.g. shredders and baling presses)
- Operating costs and loss of reputation in the event of inadequate waste management

**Opportunities:**

- Reducing waste to lower environmental footprint and achieve cost savings
- Better transparency in waste flows allows for proper waste management, reduces environmental footprint and generates cost savings
- Success factor for circular business models/new circular partnerships

### Issue 10: Logistics and mobility

For V-ZUG, the focus is particularly on the greenhouse gas emissions resulting from the following aspects:

- Upstream and downstream logistics: Logistics in the upstream and downstream value chain.
- Intra-company logistics: Optimisation of transport between V-ZUG sites (incl. route planning).
- Warehouse management: Optimal warehouse size and efficient warehouse management are paramount here.
- Fleet management: Optimisation of the type and powertrain technology of vehicles.
- Business travel
- Employee mobility: Use of various means of transport during commuting

**Actual and potential positive or negative impacts:**

+	Actual	Reduced environmental impact by raising awareness among employees and logistics partners in the area of mobility
-	Actual	Air pollution from emissions due to logistics/mobility

**Risks:**

- Loss of reputation through the visible use of old diesel cars and service vehicles

**Opportunities:**

- Cost reduction thanks to alternative drive systems/fleet e-mobility
- Positive influence on employee mobility behaviour for a lower environmental footprint
- Positive influence on the mobility behaviour of logistics partners for a lower environmental footprint
- Cost reduction thanks to optimised infrastructure (e.g. warehouse size)

Issue 11: Biodiversity and ecosystems

In the field of biodiversity and ecosystems, V-ZUG takes the following aspects into account:

- Biodiversity – defined as the variety of ecosystems, species and genes – is critical for functioning ecosystem services, i.e. services provided by nature, such as pollination, climate regulation, protection against flooding, soil fertility, and the production of food, fuel, fibres and medicinal products.
- Dependence of companies and society on ecosystem services
- Direct and indirect influence of business activity on biodiversity (species diversity) and ecosystems (forests, seas, rivers, deserts, etc.):
  - Influence in the supply chain through the materials used, the extraction of raw materials, mines, etc. (upstream)
  - Influence through production sites, land use, construction method, etc. (direct operations)
  - Influence through the use of appliances, electricity and water consumption, impact of washing detergent, microplastics, etc. (downstream)

Actual and potential positive or negative impacts:

+	Actual	Contribution to increasing biodiversity and building ecosystems by supporting reforestation (e.g. V-Forest)
–	Actual	Impairment of biodiversity and ecosystems due to emissions and resource consumption for production
–	Actual	Use of biodiversity and ecosystems through mobility and logistics-related emissions/activities
–	Actual	Decline of biodiversity and ecosystems due to land use and expansion for production sites
–	Actual	Impact on biodiversity and ecosystems through the extraction of natural raw materials (e.g. ore extraction for steel production, minerals for batteries, precious metals)
–	Actual	Strain on natural resources and ecosystems as a result of products and their use (e.g. metals, water for energy)

Risks:

- Loss of reputation if the issue is handled inappropriately (management approach and communication)

Opportunities:

- Cost savings due to lower requirement of primary material thanks to the circular economy in order to preserve ecosystems and resources

# Focus topic: Entrepreneurship for sustainable prosperity

## Issue 12: Responsible and resilient supply chain

For V-ZUG, this includes the following aspects:

- Supplier management: Shaping the supplier-buyer relationship, building and maintaining a supplier base, appropriate risk management and ensuring supply security.
- Stable partnerships: Partnerships that are based on trust and contribute to supply chain resilience (including the financial stability of the suppliers).
- Sustainable procurement policies: Specification and monitoring of standards regarding the environment, social responsibility and economic efficiency in the supply chain in order to make a positive contribution and achieve improvements.
- Traceability and transparency: The goal is to create the greatest possible transparency with regard to individual supply chains, thereby ensuring that individual corporate responsibility can be assumed.
- Good partnerships in the supply chain are an important component of a functioning circular economy.
- Capacity building: Stakeholders within the supply chain are expected to support themselves in developing and improving their skills.

Actual and potential positive or negative impacts:		
<div></div>	Actual	<b>Influence on the financial stability of suppliers thanks to long-term partnerships</b>
<div></div>	Actual	<b>Fostering the circular economy through partnerships</b>
<div></div>	Actual	Contribution to increasing social/environmental standards in the supply chain through high requirements (CoC, Supplier CoC, audits)
<div></div>	Potential	<b>Contribution to a decent work environment (in particular without child labour or forced labour) through compliance with social standards (zero-tolerance policy in the Supplier CoC) and measures (audits, etc.)</b>
<div></div>	Potential	<b>Financial stability, secure jobs with fair and equal pay, and increased prosperity of the suppliers' employees in the upstream value chain</b>
<div></div>	Potential	Knowledge transfer and mutual learning with an impact on, for example, supplier innovation
<div></div>	Potential	Adverse impact on the prosperity and financial stability of suppliers as a result of lower demand for raw materials and changes in the supply chain
<div></div>	Potential	Risk to the quality of life and health of the local population in the areas of resource extraction

### Risks:

- Supply disruptions or more expensive procurement, e.g. due to extreme weather conditions, geopolitical events, pandemics and shortages of raw materials
- Material bottlenecks and dependencies on suppliers (low resilience)
- Insufficient risk management by suppliers with higher risks results in negative incidents and loss of reputation
- Loss of reputation caused by general misconduct by suppliers
- Resource-intensive and difficult supplier management

### Opportunities:

- Future-fit, innovative partnerships and supplier projects to achieve greater sustainability
- Resilient and trust-based supplier relationships as a result of greater collaboration
- Effective supplier management boosts transparency and traceability in supply chains in tandem with due diligence



### Issue 13: Long-term corporate success as added value for society

For V-ZUG, this includes the following aspects:

- Profit and productivity: Our long-term corporate success is a fundamental prerequisite for investments that promote sustainability and safeguard local jobs.
- Doing business within planetary limits: The ecological limits of our planet must be observed in the use of natural resources.
- Investments for a future-fit society: This includes investments in infrastructure projects as well as the investment philosophy of the V-ZUG pension fund.
- Site policy and its indirect economic impacts: The impact of our commitment to the Switzerland site (including taxes) as well as the further development of the expertise hub or boosting innovation at V-ZUG sites.
- Partnerships, joint ventures and collaboration: Added value and innovation often have their roots in partnerships, and some challenges necessitate working with other organisations. We work together with a large number of stakeholders in the fields of research and science, in the public sector as well as with corporate networks, associations, business partners and charitable organisations, etc.

**Actual and potential positive or negative impacts:**

<div></div> Actual	<b>Safeguarding employee jobs and fair wages through stable corporate profits and profitability</b>
<div></div> Actual	<b>High and stable corporate profitability that benefits tax collection at sites and sustainability efforts</b>
<div></div> Actual	Economic and social development and attractiveness of the sites thanks to the innovative capacity and availability of skilled workers as well as the supply of jobs and training positions
<div></div> Potential	Influence on the industry, market and competitors for the benefit of sustainability (e.g. energy efficiency) as a role model and driver of innovation
<div></div> Potential	Positive influence of public discourse (on sustainability in general, long-term site policy of stakeholders involved, etc.) by providing impetus
<div></div> Potential	Multiplier effects in partnerships (e.g. involvement of suppliers in sustainability projects and/or influence on construction partners, investors and architects, etc.)

**Risks:**

- The supply of products and services has low or no demand among the target groups, resulting in loss of market share
- Negative changes in the market situation lead to lower net sales (inflation, recession, geopolitical tensions, sanctions, etc.)
- Loss of reputation and/or business losses due to ineffective/incorrect communication (e.g. “greenwashing” or missed environmental and climate targets)
- Inadequate financial stability of the company, affecting the resources available for sustainability efforts as well as business success

**Opportunities:**

- V-ZUG is perceived as a sustainability pioneer, leading to more customers and net sales
- Development of innovative circular business models for the benefit of long-term business success

Issue 14: Business ethics and compliance

V-ZUG pays attention to the following aspects:

- Corporate ethics (Code of Conduct): This is about how V-ZUG carries out its business activities. Besides proactive legal compliance, business operations must be commensurate with ethical and moral principles (e.g. adherence to human rights).
- Corporate governance: This has to do with binding roles, clear responsibilities and effective supervisory and oversight functions between the Executive Committee and the Board of Directors.
- Internal policy management: This relates to whether internal guidelines and policy documents exist and how they are communicated to employees and established within the company.
- Reporting mechanisms: This concerns confidential complaints procedures that enable any misconduct or grievances relating to V-ZUG's business activities to be reported.
- Transparency and communication with stakeholders: This is about the company's communication and information policy, which can at times influence the extent to which stakeholders are able to form a truthful and complete picture of the company.
- Application of and compliance with mandatory and voluntary standards, e.g. relating to product quality or management systems for quality, the environment, staff, etc.

Actual and potential positive or negative impacts:

+	Actual	A humane work environment free from forced labour through zero-tolerance policy and measures (audits, etc.)
+	Actual	Informed customers thanks to transparent, objective and fair communication and advertising/marketing
+	Actual	The freedoms of employees according to the collective agreement (metal and electric industry) are guaranteed
+	Actual	Reduction in corruption through responsible and ethical management thanks to zero-tolerance policy (CoC), training of employees, supervision by managers and available reporting points
+	Actual	The protection of whistleblowers is guaranteed (CoC, Supplier CoC)
-	Actual	Negative effect on the regulatory environment for companies through their own misconduct (e.g. in the case of non-compliance, transparency, etc.)
+	Potential	Greater trust in the company and in the private sector through responsible business activity and role-model function

Risks:

- Legal proceedings and costs due to violations or a lack of compliance
- Employee turnover through misconduct and compliance breaches by V-ZUG
- Mistrust in the company on the part of external stakeholders due to negative incidents/misconduct

Opportunities:

- Responsible management and intact reputation ensure the licence to operate in the long term
- Retention and motivation of employees through trustworthy employer behaviour

### Issue 15: IT security and data protection

V-ZUG pays attention to the following aspects in this regard:

- Robust and regularly reviewed IT systems to prevent cyberattacks
- Investing in state-of-the-art security systems to protect against cyberattacks in keeping with the changing risks
- Regular training of all employees on the subjects of IT security and data protection, including simulation of scenarios and exploring security vulnerabilities
- Ensuring production and delivery availability of products thanks to stable IT systems
- Secure and trustworthy handling of external data of customers, suppliers and other partners in compliance with data protection laws
- Secure and trustworthy handling of sensitive, internal data concerning employees, patents, specifications, designs, source code, etc.
- Compliance with archiving requirements for sensitive data (how and where it is stored, protection against fire and water, etc.)

**Actual and potential positive or negative impacts:**

+	Actual	Guaranteeing functional operations with a focus on production and delivery readiness
+	Actual	Guaranteeing data protection and privacy of customers
+	Actual	Employees are trained in the secure use of IT devices and data protection

**Risks:**

- Vulnerabilities in data protection management and IT security can lead to production and delivery disruptions

**Opportunities:**

- Constant availability of products (provision, production and delivery) thanks to stable IT systems

# GRI index

The following GRI index is based on V-ZUG's materiality matrix, which was updated in 2024 with input from external and internal stakeholders and in line with the EU ESRS standards. Relevant information is presented transparently in this 2024 Annual Report and is supplemented with additional details in the index. The following table shows the association between the relevant GRI Standards and the subjects evaluated in the materiality process, plus the top-level focus topics:

Focus topic	Subject	GRI indicators	CO 964	Matching ESRS	SDG	Page
Products and services for a future-fit society	Energy-efficient design and ecological use	GRI 3-3	Environmental concerns, Article 964b para. 1 and 2	E1, E5, S4	7, 9, 12, 13	p. 29
	Durable and circular product design	GRI 301	Environmental concerns, Article 964b para. 1 and 2	E5		
	Innovation and customer benefit	GRI 3-3 Own metrics: CHF as % of turnover for innovation (R&D)	Social concerns, Article 964b para. 1 and 2	G1		
	Customer satisfaction	GRI 416	Social concerns, Article 964b para. 1 and 2	E1, E5, S2, S4, G1		
Resilient and committed employees	Health and safety of employees	GRI 403	Employee concerns, Article 964b para. 1 and 2	S1	8	p. 35
	Development of potential and know-how management	GRI 401, GRI 404	Employee concerns, Article 964b para. 1 and 2	S1		
	Diverse and inclusive working culture	GRI 405	Employee concerns, Article 964b para. 1 and 2	S1, G1		
Environment and climate protection	Resource-efficient operations	GRI 302, GRI 303	Environmental concerns, Article 964b para. 1 and 2	E1, E2, E3, E5	7, 9, 12, 13	p. 39
			Climate reporting pursuant to the TCFD			
	Logistics and mobility	GRI 305	Environmental concerns, Article 964b para. 1 and 2	E1, E2, E5		
	Operational waste management	GRI 306	Environmental concerns, Article 964b para. 1 and 2	E1, E5		
	Biodiversity and ecosystems	GRI 3-3	Environmental concerns, Article 964b para. 1 and 2	E4		

Focus topic	Subject	GRI indicators	CO 964	Matching ESRS	SDG	Page
Entrepreneurship for sustainable prosperity	Responsible and resilient supply chain	GRI 204, GRI 308, GRI 414	Environmental concerns, Article 964b para. 1 and 2; Social concerns, Article 964b para. 1 and 2; Respect for human rights, Article 964b para. 1 and 2; Child labour and conflict materials (DDTrO)	E1, S2, S3, G1	8, 9, 12	p. 43
	Long-term corporate success as added value for society	GRI 201, GRI 203	Social concerns, Article 964b para. 1 and 2	E1, E5, S1, S3, S4, G1		
	Business ethics and compliance	GRI 2-23, GRI 419, GRI 417, GRI 415	Prevention of corruption, Article 964b para. 1 and 2	S1, S4, G1		
	IT security and data protection	GRI 418	Social concerns, Article 964b para. 1 and 2; Employee concerns, Article 964b para. 1 and 2	S4, G1		

GRI: Global Reporting Initiative  
Article 964b CO: Swiss Code of Obligations, transparency on non-financial matters  
ESRS: European Sustainability Reporting Standards, E = environmental standards, S = social standards, G = governance standards  
SDG: UN Sustainable Development Goals  
TCFD: Taskforce for Climate-related Financial Disclosure (Climate Report)  
DDTrO: Ordinance of 3 December 2021 on Due Diligence and Transparency regarding Minerals and Metals from Conflict-Affected Areas and Child Labour

General information

Indicator	Description	Comment/reference
Foundation (2021)		
GRI 1	Principles (2021)	In line with GRI standards, V-ZUG Holding AG produced this report covering the period from 1 January 2024 to 31 December 2024.
The organisation and its reporting practices (2021)		
GRI 2-1	Organisational details	<p>V-ZUG Holding AG</p> <p>Company limited by shares under Swiss law; listed on the SIX Swiss Exchange stock market</p> <p>Headquarters: Zug, Switzerland</p> <p>See chapter <a href="#">"The V-ZUG Group in the Annual Report 2024"</a></p>
GRI 2-2	Entities included in the organisation's sustainability reporting	<p>The Annual Report covers the companies that make up V-ZUG Holding AG.</p> <p>Unless otherwise stated, the report on non-financial matters covers the following three companies (production sites): V-ZUG AG, V-ZUG Kühltechnik AG and V-ZUG (Changzhou) Special Components Co., Ltd. (see "About this report").</p> <p>The Annual Report (Financial Report) covers all the V-ZUG Group companies owned directly or indirectly by V-ZUG Holding AG.</p> <p>Entities are consolidated in line with the consolidation approach.</p> <p>See 2024 Annual Report.</p>
GRI 2-3	Reporting period, frequency and contact point	<p>V-ZUG reports annually for the financial year, 1 January 2024 to 31 December 2024, reporting date: 31 December 2024</p> <p>The report on non-financial matters is being published for the second time as part of the Annual Report. The Annual Report is produced annually for the previous financial year (1 January 2024 to 31 December 2024, reporting date: 31 December 2024).</p> <p>The previous Sustainability Report was published on 13 March 2023.</p> <p>The contact person for questions is Marcel Niederberger, Head of Sustainability: <a href="mailto:marcel.niederberger@vzug.com">marcel.niederberger@vzug.com</a></p>
GRI 2-4	Restatements of information	<p>The calculation for "disposal by type" (amount in t and shares in %) was adjusted retroactively for the 2023 financial year due to optimised data collection</p> <p>The key figures for natural gas from the production site in Sulgen have been revised retroactively for the 2023 financial year due to optimised data collection. This has led to an increase of 1 % in CO<sub>2</sub> emissions across the entire Group.</p> <p>The method for calculating LTIR (lost time incident rate) was adapted to international standards for comparability. Occupational accidents lasting three days or more are now included in the calculation (previously already after one day). This applies to the data for 2023 and 2024.</p> <p>From 2024 onwards, we have no longer taken into account external apprentices and retirees when calculating the turnover rate (no employment contract with V-ZUG, e.g. apprentices who are trained at V-ZUG but do not work for V-ZUG). We have adapted the data in recent years.</p>

Indicator	Description	Comment/reference
GRI 2-5	External assurance	Our Scope 1 and 2 CO <sub>2</sub> emissions (including offsetting) were validated externally by Swiss Climate. The Sustainability Report has not been externally audited as a whole.

### Activities and employees (2021)

GRI 2-6	Activities, value chain and other business relationships	<p><b>Industry: Household Appliances</b></p> <p>Business model: Development, manufacture and sale of large household appliances (e.g. washing machines, ovens, refrigerators, etc.). Current product range at <a href="https://www.vzug.com/products">www.vzug.com/products</a></p> <p><b>Value chain:</b></p> <p>V-ZUG operates its own sales companies in Australia, Austria, Belgium, China, Denmark, France, Germany, Ireland, Hong Kong, Luxembourg, the Netherlands, Singapore, Thailand, the United Kingdom and Vietnam. V-ZUG products are also available via distributors in Israel, Italy, Lebanon, Norway, Spain, Turkey, Ukraine and the USA. V-ZUG serves a total of 24 markets including Switzerland, its home market.</p> <p>Business relations with Russia have been suspended due to sanctions.</p> <p><b>Organisational supply chain:</b></p> <p>In total, we work with and maintain long-term relationships with around 1,500 Tier 1 suppliers. We also have an estimated 5,000 additional indirect suppliers (Tier 2). Around 60 % of our Tier 1 suppliers are based in Switzerland, and another 30 % or so are located in nearby European countries. Payments amount to approximately CHF 200 million per year.</p> <p><b>Downstream activities and entities:</b></p> <p>Private customers, specialist retailers, kitchen builders, real estate management companies and real estate owners. V-ZUG's products are sold predominantly via trade outlets. The traders sell them to installers and display them in various settings, including showrooms, where end consumers can obtain information about the products. V-ZUG also operates numerous exhibition and advisory centres as well as V-ZUG Studios worldwide.</p> <p>In addition to commercial firms and kitchen builders, key customer groups primarily include real estate management companies and real estate owners, as well as their agents (such as architects and general contractors). Private customers purchase V-ZUG appliances predominantly via specialist retailers, kitchen builders, general contractors and architects.</p> <p><b>Strategic partnerships:</b></p> <ul style="list-style-type: none"> <li>• Tech Cluster Zug AG, Zug</li> <li>• Universities and higher education establishments: HSLU, ZHAW, HWZ, FHNW, OST, ETH, EMPA</li> <li>• SENS – Foundation for recycling electrical and electronic appliances</li> </ul> <p><b>Social engagement:</b></p> <p>At its production facilities in Zug, V-ZUG AG works with the “zuwebe” Foundation, enabling people with disabilities to integrate into the work process.</p> <p>V-ZUG Kühltechnik AG has for many years maintained a partnership with Obvita, which supports the integration of people with visual disabilities and mental disorders into professional and social life. Via this collaborative initiative, a working group from Obvita regularly carries out assembly tasks at V-ZUG Kühltechnik AG's refrigerator production facilities.</p>
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Indicator	Description	Comment/reference
GRI 2-7	Employees	<p>The total number of employees (2024: 2,064) and a breakdown by gender and region:</p> <ul style="list-style-type: none"> <li>Women: 499</li> <li>Men: 1,565</li> <li>Switzerland: 1,813</li> <li>Europe (excl. Switzerland): 84</li> <li>Asia: 145</li> <li>Australia: 22</li> </ul> <p>Total number of employees with permanent contracts:</p> <ul style="list-style-type: none"> <li>Women: 447</li> <li>Men: 1,437</li> <li>Switzerland: 1,701</li> <li>Europe (excl. Switzerland): 84</li> <li>Asia: 77</li> <li>Australia: 22</li> </ul> <p>Total number of employees with fixed-term contracts:</p> <ul style="list-style-type: none"> <li>Women: 52</li> <li>Men: 128</li> <li>Switzerland: 112</li> <li>Europe (excl. Switzerland): 0</li> <li>Asia: 68</li> <li>Australia: 0</li> </ul> <p>Employees with no guaranteed working hours: At V-ZUG, there are no employees without guaranteed working hours.</p> <p>Total number of full-time employees:</p> <ul style="list-style-type: none"> <li>Women: 338</li> <li>Men: 1,434</li> <li>Switzerland: 1,530</li> <li>Europe (excl. Switzerland): 77</li> <li>Asia: 144</li> <li>Australia: 21</li> </ul> <p>Total number of part-time employees:</p> <ul style="list-style-type: none"> <li>Women: 161</li> <li>Men: 131</li> <li>Switzerland: 283</li> <li>Europe (excl. Switzerland): 7</li> <li>Asia: 1</li> <li>Australia: 1</li> </ul> <p>V-ZUG's business operations do not cause any significant seasonal fluctuations in headcount.</p> <p>The 2024 figures relate to the V-ZUG Group.</p>
GRI 2-8	Workers who are not employees	<p>Temporary workers, appointed via external agencies: 94</p> <p>External contractors (support): 91</p> <p>The 2024 figures relate to the V-ZUG Group.</p>



Indicator	Description	Comment/reference
<b>Corporate management (2021)</b>		
GRI 2-9	Governance structure and composition	<p>V-ZUG Holding AG's Board of Directors (hereinafter "BoD") has three standing committees: the Audit Committee, the Human Resources and Compensation Committee and the Digitalisation Advisory Board.</p> <p>The Executive Committee's operational management structure is made up of the following departments (for details, see "Executive Committee" on our website):</p> <ul style="list-style-type: none"> <li>• CEO V-ZUG Group: Quality, Corporate Strategy, Sustainability</li> <li>• International department: Market Subsidiaries, Distributors, OEM Business, Business Development</li> <li>• Finance department: Group Finance and Controlling, Business Controlling, Legal and Compliance, Investor and Media Relations</li> <li>• Swiss Market department: Sales, Marketing, Customer Care, Field Service</li> <li>• Operations department: Supply Chain Management, Procurement, Production Plants, Infrastructure, Transformation/Industrial Automation</li> <li>• Technology department: Product Segments, Mechanical Design, Software &amp; Electronics, Competence Centre, Technology &amp; Innovation, ICT</li> <li>• Human Resources department: Competence Centre, Services &amp; IT Projects, Business Partners, Vocational Training, Internal Communication</li> <li>• Marketing department: Global Product Management, Global Marketing and Communications, Global Omnichannel Commerce and Data, Global Design, Global Sales Excellence, Global Product Marketing</li> </ul> <p>Committees responsible for decision-making on environmental and social topics:</p> <ul style="list-style-type: none"> <li>• Executive Committee (hereinafter "EC")</li> <li>• "V-ZUG Sustainability Workforce" working group led by the Head of Sustainability</li> <li>• Internal auditors for quality, environment and occupational safety, Cyber Security Committee</li> </ul>
		<p>In June 2020, the V-ZUG Group broke away from the Metall Zug Group and was simultaneously listed on SIX Swiss Exchange. Metall Zug AG retains around 30 % of V-ZUG Holding AG and remains an anchor shareholder.</p> <p>See "Spin-off and listing" on the website.</p>
GRI 2-10	Nomination and selection of the highest governance body	See 2024 Annual Report.
GRI 2-11	Chair of the highest governance body	The Chair of the Board of Directors is Oliver Riemenschneider. Like all members of the BoD, he is non-executive. See 2024 Annual Report.
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	<p>Material sustainability topics are approved by the BoD and the EC. Building on this, medium and long-term sustainability goals are defined and approved by the BoD and the EC. Those members of the EC who are responsible for focus topics regularly evaluate the degree to which these topics have been achieved, together with the Head of Sustainability and the "Sustainability Workforce".</p> <p>At the four regular BoD meetings each year, information regarding sustainability issues is presented and/or proposals are submitted for decisions. Sustainability issues also form an integral part of the risk management process, which is overseen annually by the BoD.</p> <p>There is no structured stakeholder discussion regarding sustainability issues at board level. Issues are addressed as required.</p> <p>Since 2023, the report on non-financial matters has been integrated into the Annual Report and approved by the BoD.</p>

Indicator	Description	Comment/reference
GRI 2-13	Delegation of responsibility for managing impacts	Overall responsibility is delegated to the CEO. Four members of the EC are each responsible for a single focus topic. The impact of measures and campaigns in terms of our focus topics is assessed three times a year. Annual sustainability reporting provides information about targets and the degree to which they have been met. It is made available to all stakeholders including the governance body.
GRI 2-14	Role of the highest governance body in sustainability reporting	Since 2023, the report on non-financial matters has been integrated into the Annual Report and approved by the BoD.
GRI 2-15	Conflicts of interest	Conflicts of interest must be disclosed and avoided where possible. Failing this, members shall abstain from voting on any matter where they have a conflict of interest (see <b>“Organisational Regulations”</b> at <a href="https://www.vzug.com/ch/en/corporate-governance">https://www.vzug.com/ch/en/corporate-governance</a> ).
GRI 2-16	Communication of critical concerns	<p>Compliance-related matters must be reported to the official reporting point (<a href="mailto:compliance@vzug.com">compliance@vzug.com</a>). The V-ZUG Group's Legal department is responsible for handling, documenting and finalising compliance-related cases.</p> <p>The Audit Committee is responsible for our whistle-blowing process as part of our Code of Conduct. The Legal department reports directly to the Audit Committee in such cases.</p> <p>In 2024, five cases were reported via <a href="mailto:compliance@vzug.com">compliance@vzug.com</a>. One case was reported via the external reporting point (The Swiss Crisis Intervention Foundation).</p> <p>Such reports are treated in confidence.</p>
GRI 2-17	Collective knowledge of the highest governance body	The topic of “sustainable development” is regularly discussed at the quarterly meetings of the BoD. In this way, the BoD is actively involved and keeps up to date with the latest information on the key sustainability issues for V-ZUG and the associated requirements, challenges, opportunities and risks.
GRI 2-18	Evaluation of the performance of the highest governance body	The performance of the BoD is not evaluated externally. The BoD conducts an annual self-assessment.
GRI 2-19	Compensation policy	See 2024 Annual Report, chapter <b>“Compensation Report”</b> .
GRI 2-20	Process to determine remuneration	<p>The process for determining remuneration (including the remuneration system) is laid down in the Compensation Report; see 2024 Annual Report, chapter <b>“Compensation Report”</b>.</p> <p>The results of stakeholder voting regarding the compensation policies and proposals are published in the minutes of the Annual General Meeting.</p>
GRI 2-21	Annual total compensation ratio	<p>The compensation for the BoD and EC is disclosed in the Compensation Report.</p> <p>See 2024 Annual Report, chapter <b>“Compensation Report”</b>.</p>
<b>Strategy, policies and practices (2021)</b>		
GRI 2-22	Statement on sustainable development strategy	See <b>“Interview with CEO Peter Spirig”</b> .

Indicator	Description	Comment/reference
GRI 2-23	Policy commitments	<p>V-ZUG undertakes to trade in a responsible, entrepreneurial manner. Its operational principles are formalised in its Code of Conduct (revised in March 2023) and serve as a basis for its Code of Conduct for Suppliers (published in March 2023).</p> <p>Our Code of Conduct calls on us to treat everyone with respect and tolerance. No discrimination whatsoever will be accepted.</p> <p>The amended version of the Code of Conduct contains a stronger commitment to human rights and sets out the principles of good corporate governance as part of V-ZUG's vision, mission and core values.</p> <p>V-ZUG does not tolerate any form of corruption or active or passive bribery. This principle is part of our Code of Conduct and is further specified in our anti-corruption regulations.</p> <p>The precautionary principle is enshrined in V-ZUG's ethical principles and management guidelines and is monitored by an integrated management system (quality, environment and occupational safety). Certifications in accordance with ISO 9001, ISO 14001 and ISO 45001 at the Zug site (incl. service centres and V-ZUG Studios in Switzerland) also contribute to the precautionary principle, in the shape of preventive measures within the company's operations.</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"> <li>• ISO 9001 certificate (Zug site)</li> <li>• ISO 14001 certificate (Zug site)</li> <li>• ISO 45001 certificate (Zug site)</li> </ul> <p>The Code of Conduct and the Code of Conduct for Suppliers contain a zero-tolerance stance towards forced labour and child labour.</p>
GRI 2-23	Policy commitments	<p>V-ZUG's key policies, codes of conduct and principles (<a href="#">see website</a>) are:</p> <ul style="list-style-type: none"> <li>• Code of Conduct of the V-ZUG Group (see website, <a href="#">“Corporate Governance”</a>), including guidelines for ethical business decisions</li> <li>• Code of Conduct for Suppliers (see website, <a href="#">“Corporate Governance”</a>)</li> <li>• Anti-corruption regulations (see website, <a href="#">“Corporate Governance”</a>)</li> <li>• Vision, mission and core values</li> <li>• Principles of collaboration</li> <li>• Terms of Employment (TOE)</li> <li>• Annex 1 to the TOE (ethical principles)</li> <li>• ISO 9001, 14001 and 45001 certificates (including annexes, accessible via website)</li> <li>• EU General Data Protection Regulation (GDPR)</li> <li>• Swiss Data Protection Act</li> <li>• Internal competency model</li> </ul> <p>The Code of Conduct is approved by the BoD.</p> <p>The Code of Conduct applies globally to all employees, including members of the BoD and other governance bodies of companies belonging to the V-ZUG Group. The Code of Conduct is available in five languages.</p> <p>New joiners are trained in the Code of Conduct, and all employees sign it as part of their employment contract.</p> <p>The Code of Conduct is available on the website for business partners and stakeholders to view.</p> <p>The Code of Conduct for Suppliers forms part of supplier agreements. When onboarding new suppliers, we initiate self-assessments beforehand and, where necessary, pre-audits, and we obtain financial information.</p>

Indicator	Description	Comment/reference								
GRI 2-24	Embedding policy commitments	<p>It is the job of V-ZUG management to ensure that all employees are familiar with the Code of Conduct, understand it and act accordingly.</p> <p>Regular training and e-learning courses take place for all employees, and compliance audits are carried out as required.</p> <p>Action plans are drawn up with suppliers in the event of non-compliance with the standards or further violations of the Code of Conduct for Suppliers. In the case of insufficient progress or repeated breaches of the Code of Conduct for Suppliers, the partnership is terminated.</p> <p>See also: GRI 2-23.</p>								
GRI 2-25	Processes to remediate negative impacts	<p>V-ZUG has an internal process for dealing with grievances, which are handled on a case-by-case basis.</p> <p>In the event of negative impacts, an internal team will draw up further measures (e.g. product safety, emergency and crisis management).</p>								
GRI 2-26	Mechanisms for seeking advice and raising concerns	<p>Employees who believe in good faith that certain behaviour violates V-ZUG's Code of Conduct have a duty to report such behaviour to their manager or the Legal department (compliance@vzug.com). Such reports are treated in confidence. Employees who report in good faith a potential violation of the Code of Conduct need have no fear that reporting their suspicions will have negative repercussions for their employment at the company. There is also an external reporting point for serious grievances (bullying and sexual harassment).</p>								
GRI 2-27	Compliance with laws and regulations	<p>V-ZUG complies with laws and regulations worldwide.</p> <p>There were no environmental violations/fines.</p> <p>Number of environmental violations/fines:</p> <table><tr><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>	2021	2022	2023	2024	0	0	0	0
2021	2022	2023	2024							
0	0	0	0							

Indicator	Description	Comment/reference
GRI 2-28	Membership in associations and interest groups	<p>V-ZUG AG is a member of or is represented on the board of the following associations and interest groups:</p> <ul style="list-style-type: none"> <li>• aha! Swiss Allergy Centre (joint venture)</li> <li>• amk – “The Modern Kitchen” working group</li> <li>• economiesuisse</li> <li>• Electrosuisse – Association for electrical, energy and information technology</li> <li>• EEBUS – Empowering the digitalisation of Energy transition</li> <li>• ETH Foundation</li> <li>• Europa Forum / Lucerne Dialogue</li> <li>• FEA (the Swiss association for household and commercial appliances), board member</li> <li>• IG exact (Excellence in Applied Electronics and Technologies)</li> <li>• Zug+ Climate Charter Initiative</li> <li>• Küche (the Swiss kitchen association), board member</li> <li>• PWN Professional Women's Network</li> <li>• SWISSMEM, the Swiss association for mechanical and electrical engineering industries, board member</li> <li>• SENS e Recycling, Foundation for recycling electrical and electronic appliances, board of trustees</li> <li>• sia – Swiss Society of Engineers and Architects</li> <li>• Suissetec</li> <li>• swisscleantech</li> <li>• Switzerland Innovation Park Central</li> <li>• tfz – Technologie Forum Zug, board member</li> <li>• öbu – Swiss Business Council for Sustainable Development</li> <li>• Association for the Decarbonization of Industry</li> <li>• Zug Chamber of Commerce, board member</li> <li>• Zurich Chamber of Commerce</li> </ul>

Indicator	Description	Comment/reference
<b>Stakeholder engagement (2021)</b>		
GRI 2-29	Approach to stakeholder engagement	<p>Key stakeholder groups have been defined in dialogue with internal departments. To achieve broad-based support for the materiality process (last revised in 2024), 62 representatives of V-ZUG's central stakeholders were consulted in an online survey. These included the BoD, EC, employees, customers, partners, suppliers, banks, investors and representatives from politics and academia.</p> <p>The materiality matrix that resulted from the consultation forms an important basis for reporting.</p> <p>V-ZUG's stakeholders are engaged as follows:</p> <ul style="list-style-type: none"> <li>Customers: customer surveys, customer contacts (around 300 service technicians in the field sales and customer service), customer magazine and guided tours at the Zug production site. In order to experience the wide variety of product functions, free appliance demonstrations are additionally offered by V-ZUG customer advisors.</li> <li>Employees: employee survey, intranet and Yammer (internal social media platform); specialist internal communication unit and various central and local functions (including Human Resources, Legal and Compliance and management)</li> <li>Investors/shareholders: General Meetings, Annual Report, investor roadshows</li> <li>Suppliers: annual meetings, audits</li> <li>Sales partners: annual product presentation and various symposiums, trade fairs and events.</li> <li>Trade unions: within the context of the collective employment agreement (CEA)</li> <li>Media: information provided by Corporate Communications &amp; Investor Relations</li> <li>Research and education: board activities (e.g. Minergie association, SENS), speaking engagements, participation in working groups with educational institutions and the award of project work for students</li> </ul>
GRI 2-30	Collective bargaining agreements	<p>All employees at the Zug site in Switzerland are subject to the collective employment agreement (CEA) of the Association of Swiss Engineering Employers (ASM). The current CEA for the Swiss MEM industries came into effect on 1 July 2023 and is valid until 30 June 2028. The employees' associations Angestellte Schweiz, Unia, Syna, Swiss Association of Commercial Employees, Schweizer Kader Organisation (SKO) and the employers' association ASM are involved as negotiation partners.</p> <p>It is important for V-ZUG that employees are able to represent their interests and participate in the company's development. According to the CEA, the employee representative body represents the interests of the workforce to HR and the EC and works to ensure the CEA provisions are adhered to. It also seeks to promote trusting collaboration between the EC and employees, helps to create attractive working conditions and acts as a contact and advisory point for differences of opinion. The members of the employee representative body are elected in predefined electoral groups by all employees.</p> <p>The Sulgen site (V-ZUG Kühlttechnik) and the Changzhou site in China are not subject to a collective bargaining agreement. V-ZUG Kühlttechnik is a separate legal entity, and employment contracts are subject to the individual employment contract and the Swiss Code of Obligations. Employment contracts in Changzhou are concluded in line with V-ZUG employment guidelines and in accordance with human rights conventions.</p>

Specific details

Aspect	Indicator	Description	Comment/reference
Key issues	GRI 3 (2021)		
GRI 3-1		Process to determine material topics	<p>In 2024, V-ZUG conducted a new materiality analysis and updated the matrix of material sustainability topics. Although the company is not yet subject to the reporting requirement of the EU Sustainability Reporting Directive (CSRD), the analysis was carried out using the double materiality method in accordance with the European Sustainability Reporting Standards (ESRS). In doing so, both the impact of V-ZUG on the environment, society and economy (impact materiality) and the risks and opportunities that have an impact on the company (financial materiality) were assessed.</p> <p>The internal Sustainability Workforce revised the list of material topics and reviewed it with feedback from stakeholders. A total of 15 material topics were identified.</p> <p>168 specific impacts, risks and opportunities were identified and evaluated. These were assessed according to their extent and reach, with adverse impacts additionally assessed according to their irreversibility and potential impacts according to the probability of occurrence. A weighting highlighted the strategic importance of key elements. The results were validated by an online survey with 62 stakeholders and approved by the Executive Committee and the Board of Directors.</p> <p>See the chapter "<a href="#">Sustainability as part of the strategy</a>" and overview "<a href="#">Annex: Impacts, risks and opportunities</a>".</p>
GRI 3-2		List of material topics	See chapter " <a href="#">Sustainability as part of the strategy</a> ".
Products and services for a future-fit society			
Energy-efficient design and ecological use			
GRI 3-3		Management of material topics	See chapter " <a href="#">Products and services for a future-fit society</a> ", " <a href="#">Environment and climate protection</a> " and overview " <a href="#">Annex: Impacts, risks and opportunities</a> ".
Durable and circular product design			
GRI 3-3		Management of material topics	See chapter " <a href="#">Products and services for a future-fit society</a> ", " <a href="#">Environment and climate protection</a> " and overview " <a href="#">Annex: Impacts, risks and opportunities</a> ".

Aspect	Indicator	Description	Comment/reference																																													
GRI 301 Materials (2026)	GRI 301-1	Materials used by weight or volume	<div>Materials used by type (in tonnes):</div> <table><tr><th>Type of material</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Iron</td><td>7,426</td><td>8,031</td><td>5,651</td><td>6532</td></tr><tr><td>Stainless steel</td><td>1,755</td><td>1,711</td><td>1,378</td><td>1435</td></tr><tr><td>Aluminium</td><td>229</td><td>148</td><td>195</td><td>202</td></tr><tr><td>Non-ferrous metal</td><td>94</td><td>80</td><td>77</td><td>77</td></tr><tr><td>Oils, fats, lubricants</td><td>21</td><td>16</td><td>10</td><td>10</td></tr><tr><td>Hazardous substances</td><td>675</td><td>640</td><td>542</td><td>597</td></tr></table> <div>Number of products recalled:</div> <table><tr><th></th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Products recalled</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table> <div>No products had to be recalled in the reporting year.</div>	Type of material	2021	2022	2023	2024	Iron	7,426	8,031	5,651	6532	Stainless steel	1,755	1,711	1,378	1435	Aluminium	229	148	195	202	Non-ferrous metal	94	80	77	77	Oils, fats, lubricants	21	16	10	10	Hazardous substances	675	640	542	597		2021	2022	2023	2024	Products recalled	0	0	0	0
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Innovation and customer benefit																																																
GRI 3-3		Management of material topics	See chapter “ <a href="#">Products and services for a future-fit society</a> ”, “ <a href="#">Environment and climate protection</a> ” and overview “ <a href="#">Annex: Impacts, risks and opportunities</a> ”.																																													
Own metric		CHF as % of turnover for research and development, innovation (R&D)	See the chapter “ <a href="#">Segment report</a> ”.																																													
Customer satisfaction																																																
GRI 3-3		Management of material topics	See chapter “ <a href="#">Products and services for a future-fit society</a> ”, “ <a href="#">Environment and climate protection</a> ” and overview “ <a href="#">Annex: Impacts, risks and opportunities</a> ”.																																													



Aspect	Indicator	Description	Comment/reference
GRI 416 Customer health and safety (2016)	GRI 416-1	Assessment of the health and safety impacts of product and service categories	<p>All operating instructions for V-ZUG's appliances contain information on safe use, proper disposal of packaging materials and of the appliance, as well as tips for saving energy (and water, in the case of washing machines). The appliances meet the IEC 60335-1 standard (Safety of electrical appliances for household use). Furthermore, V-ZUG's appliances satisfy the EU's RoHS and WEEE directives. For the WEEE directive, this means in particular that all V-ZUG appliances are labelled according to the standard and the operating instructions contain information about proper disposal.</p> <p>In addition, in the installation instructions for the appliances, which are aimed directly at installation professionals, V-ZUG describes what needs to be taken into account when installing the appliances for them to function as well as possible, with maximum energy efficiency.</p>
	GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	2024: No incidents.

Resilient and committed employees

Health and safety of employees

GRI 3-3	Management of material topics	<p>See chapter “<a href="#">Resilient and committed employees</a>” and overview “<a href="#">Annex: Impacts, risks and opportunities</a>”.</p> <p>The health and safety at work policy forms part of the management process and supports the V-ZUG organisation and its strategy. Numerous processes and specification documents are held in the internal management system. Safety management conforms with legal requirements and meets the guidelines published by the Federal Commission for Occupational Safety and also the ISO 45001 standard (Zug site). V-ZUG actively seeks not only to meet the minimum legal requirements but also to get employees to participate actively by involving them in work processes and promptly implementing suggestions for improvements. Internal occupational safety experts and the in-house paramedic (at the Zug site) are available to advise employees in all matters regarding health, the prevention of occupational accidents, occupational illnesses and leisure-time accidents. Training and campaigns are intended to motivate managers and staff to incorporate occupational health and safety into their everyday activities.</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"> <li>• ISO 45100 certificate (Zug site)</li> <li>• Policy on health and safety at work (Zug site)</li> </ul> <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"> <li>• Emergency response strategy</li> <li>• Security inspection</li> <li>• Procedure for assessing risk</li> </ul>
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Aspect	Indicator	Description	Comment/reference																																													
GRI 403 Occupational health and safety (2018)	GRI 403-9, 403-10	Work-related accidents, illnesses and lost days	<p>In the case of accidents, V-ZUG makes a distinction between significant occupational accidents, minor occupational accidents and non-occupational accidents (leisure-time accidents). No such distinction is made for illnesses when recording statistics.</p> <p>Lost hours by cause:</p> <table><tr><th>Cause</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Illness</td><td>109,410</td><td>138,088</td><td>104,813</td><td>105,068</td></tr><tr><td>Occupational accident</td><td>9,619</td><td>6,922</td><td>7,491</td><td>9,523</td></tr><tr><td>Non-occupational accident</td><td>13,837</td><td>13,388</td><td>13,590</td><td>15,575</td></tr><tr><td>Total</td><td>132,866</td><td>158,398</td><td>125,894</td><td>130,166</td></tr></table> <p>Occupational accidents by LTIR:</p> <table><tr><th></th><th>2021*</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>LTIR</td><td>14.6</td><td>12.7</td><td>10.1</td><td>11.4</td></tr></table> <p>* The 2021 figures are based on accidents with at least one day of absence. From 2022 onwards, we calculate the LTIR based on three or more days of absence (according to the international standard and for comparability). As a result, the figures from 2021 are not comparable with the rest.</p> <p>Occupational fatalities in the reporting year:</p> <table><tr><th></th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Deaths</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table> <p>See "<a href="#">Targets, facts and figures</a>" in the chapter "Resilient and committed employees".</p> <p>The figures for 2024 and 2023 refer to the V-ZUG Group, while those for 2022 and 2021 refer to our production sites.</p>	Cause	2021	2022	2023	2024	Illness	109,410	138,088	104,813	105,068	Occupational accident	9,619	6,922	7,491	9,523	Non-occupational accident	13,837	13,388	13,590	15,575	Total	132,866	158,398	125,894	130,166		2021*	2022	2023	2024	LTIR	14.6	12.7	10.1	11.4		2021	2022	2023	2024	Deaths	0	0	0	0
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Aspect	Indicator	Description	Comment/reference																								
Development of potential and know-how management																											
GRI 3-3		Management of material topics	See chapter <a href="#">“Resilient and committed employees”</a> and overview <a href="#">“Annex: Impacts, risks and opportunities”</a> .																								
GRI 401 Employment (2016)	GRI 401-1	Total number and rate of newly hired employees and staff turnover	<p>Number of newly hired employees:</p> <table> <tr> <th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <td>258</td><td>280</td><td>298</td><td>233</td></tr> </table> <p>Rate of newly hired employees:</p> <table> <tr> <th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <td>14.7 %</td><td>15.1 %</td><td>14.1 %</td><td>11.3 %</td></tr> </table> <p>Staff turnover:</p> <table> <tr> <th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <td>12.5 %</td><td>10.9 %</td><td>14.1 %</td><td>14.2 %</td></tr> </table> <p>The figures for 2024 and 2023 refer to the V-ZUG Group, while those for 2022 and 2021 refer to the production sites.</p>	2021	2022	2023	2024	258	280	298	233	2021	2022	2023	2024	14.7 %	15.1 %	14.1 %	11.3 %	2021	2022	2023	2024	12.5 %	10.9 %	14.1 %	14.2 %
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12.5 %	10.9 %	14.1 %	14.2 %																								
GRI 404 Training and education	GRI 404-2	Programmes for upgrading employee skills and transition assistance programmes	<p>As a means of enhancing employability, professional development is in the interests, and is the responsibility, of both V-ZUG and its employees. With the three-tier competency model and “V-ZUGconnect”, V-ZUG specifically supports the promotion of individual talents and a culture of lifelong learning. Employees have the right, on request, to be released from their work for professional development within or outside the company, provided certain conditions are met. V-ZUG will pay all or part of the costs of the further training on request.</p> <p>For more information, see chapter <a href="#">“Resilient and committed employees”</a>.</p>																								
Diverse and inclusive working culture																											
GRI 3-3		Management of material topics	<p>See chapter <a href="#">“Resilient and committed employees”</a> and overview <a href="#">“Annex: Impacts, risks and opportunities”</a>.</p> <p>V-ZUG regularly conducts an equal pay analysis with the help of external experts.</p> <p>Examples of relevant internal documents:</p> <p>Working time regulations</p>																								

Aspect	Indicator	Description	Comment/reference																																																																											
GRI 405 Diversity and equal opportunities (2016)	GRI 405-1	Percentage of people in governance bodies and among employees, by gender and age group	<div>Employees by gender and hierarchical level: (incl. BoD)</div> <table><tr><th>Gender</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Women on the Board of Directors</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Men on the Board of Directors</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Women on the Executive Committee</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Men on the Executive Committee</td><td>6</td><td>6</td><td>4</td><td>6</td></tr><tr><td>Female managers</td><td>107</td><td>111<sup>1)</sup></td><td>110<sup>1)</sup></td><td>109*</td></tr><tr><td>Male managers</td><td>408</td><td>432<sup>1)</sup></td><td>437<sup>1)</sup></td><td>427*</td></tr><tr><td>Female employees</td><td>273</td><td>290</td><td>385</td><td>385</td></tr><tr><td>Male employees</td><td>965</td><td>1006</td><td>1164</td><td>1129</td></tr><tr><td>Total women</td><td>385</td><td>406</td><td>500</td><td>499</td></tr><tr><td>Total men</td><td>1,382</td><td>1,447</td><td>1,608</td><td>1565</td></tr></table> <div><sup>1)</sup> 2022: changes to management categorisation/employees by age (excl. Board of Directors).</div> <div>Employees by age (excl. Board of Directors):</div> <table><tr><th>Age group</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Under 30</td><td>308</td><td>334</td><td>354</td><td>334</td></tr><tr><td>30–50</td><td>907</td><td>953</td><td>1091</td><td>1037</td></tr><tr><td>Over 50</td><td>546</td><td>560</td><td>657</td><td>657</td></tr></table> <div>See chapter <a href="#">“Healthy and committed employees”</a> and chapter <a href="#">“Corporate Governance”</a> for detailed information on members of the BoD and EC (including ages).</div> <div>The figures for 2024 and 2023 refer to the V-ZUG Group, while those for 2022 and 2021 refer to the three production sites.</div>	Gender	2021	2022	2023	2024	Women on the Board of Directors	3	3	3	3	Men on the Board of Directors	3	3	3	3	Women on the Executive Committee	2	2	2	2	Men on the Executive Committee	6	6	4	6	Female managers	107	111 <sup>1)</sup>	110 <sup>1)</sup>	109*	Male managers	408	432 <sup>1)</sup>	437 <sup>1)</sup>	427*	Female employees	273	290	385	385	Male employees	965	1006	1164	1129	Total women	385	406	500	499	Total men	1,382	1,447	1,608	1565	Age group	2021	2022	2023	2024	Under 30	308	334	354	334	30–50	907	953	1091	1037	Over 50	546	560	657	657
Gender	2021	2022	2023	2024																																																																										
Women on the Board of Directors	3	3	3	3																																																																										
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Over 50	546	560	657	657																																																																										

Aspect

Indicator

Description

Comment/reference

Environment and climate protection

Resource-efficient operations

GRI 3-3		Management of material topics	<p>See chapter “Products and services for a future-fit society”, “Environment and climate protection” and overview “Annex: Impacts, risks and opportunities”.</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"><li>• ISO 14001 certificate (Zug site)</li><li>• Environmental policy (Zug site)</li></ul> <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"><li>• Hazardous substances storage</li><li>• Dealing with hazardous substances</li></ul>																														
GRI 302 Energy (2016)	GRI 302-1	Energy consumption within the organisation	<p>Absolute energy consumption in terajoules:</p> <table><tr><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>114.6</td><td>108.7</td><td>107.7</td><td>119.4</td></tr></table> <p>See “Targets, facts and figures” in chapter “Environment and climate protection”.</p>	2021	2022	2023	2024	114.6	108.7	107.7	119.4																						
2021	2022	2023	2024																														
114.6	108.7	107.7	119.4																														
	GRI 302-2	Energy intensity	<p>See “Targets, facts and figures” in chapter “Environment and climate protection”.</p>																														
GRI 303 Water and effluents (2018)	GRI 303-3	Water withdrawal	<p>Water withdrawal by site in megalitres:</p> <table><tr><th></th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Zug</td><td>29.3</td><td>29.3</td><td>31.7</td><td>31.8</td></tr><tr><td>Arbon</td><td>19.5</td><td>2.3</td><td>–</td><td>–</td></tr><tr><td>Sulgen</td><td>0.4</td><td>1.2</td><td>1.2</td><td>1.3</td></tr><tr><td>Changzhou</td><td>0.4</td><td>0.4</td><td>0.3</td><td>0.5</td></tr><tr><td>Total</td><td>49.6</td><td>33.2</td><td>33.2</td><td>33.6</td></tr></table> <p>The water withdrawn is equivalent to the water fed back.</p>		2021	2022	2023	2024	Zug	29.3	29.3	31.7	31.8	Arbon	19.5	2.3	–	–	Sulgen	0.4	1.2	1.2	1.3	Changzhou	0.4	0.4	0.3	0.5	Total	49.6	33.2	33.2	33.6
	2021	2022	2023	2024																													
Zug	29.3	29.3	31.7	31.8																													
Arbon	19.5	2.3	–	–																													
Sulgen	0.4	1.2	1.2	1.3																													
Changzhou	0.4	0.4	0.3	0.5																													
Total	49.6	33.2	33.2	33.6																													

Aspect	Indicator	Description	Comment/reference																																			
Logistics and mobility																																						
GRI 3-3		Management of material topics	<p>See chapter <a href="#">“Environment and climate protection”</a> and overview of <a href="#">“Annex: Impacts, risks and opportunities”</a>.</p> <p>The CO<sub>2</sub> assessments in Scope 1 and 2 and the statement regarding carbon neutrality at production sites were externally validated by Swiss Climate (see Assurance Statement: Carbon Footprint and Compensation Measures).</p>																																			
GRI 305 Emissions (2016)	GRI 305-1	Direct GHG emissions (Scope 1)	<p>For Scope 1, the following emissions were taken into account:</p> <ul style="list-style-type: none"><li>direct emissions of greenhouse gases are considered from sources that are owned or controlled by V-ZUG (production sites in Zug, Sulgen and Changzhou).</li></ul> <p>Emissions in tonnes of CO<sub>2</sub> equivalent (Scope 1):</p> <table><tr><th></th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Petrol</td><td>2</td><td>2</td><td>0</td><td>0</td></tr><tr><td>Diesel</td><td>1,770</td><td>1,711</td><td>1,706</td><td>1,545</td></tr><tr><td>Heating oil</td><td>560</td><td>29</td><td>71</td><td>8</td></tr><tr><td>Natural gas</td><td>1,763</td><td>1,668</td><td>556</td><td>1,321</td></tr><tr><td>Propane</td><td>0</td><td>53</td><td>1,265</td><td>387</td></tr><tr><td>Total Scope 1</td><td>4,096</td><td>3,464</td><td>3,598</td><td>3,261</td></tr></table> <p>See <a href="#">“Targets, facts and figures”</a> and the explanation of the scopes for CO<sub>2</sub> neutrality in the chapter <a href="#">“Environment and climate protection”</a>.</p>		2021	2022	2023	2024	Petrol	2	2	0	0	Diesel	1,770	1,711	1,706	1,545	Heating oil	560	29	71	8	Natural gas	1,763	1,668	556	1,321	Propane	0	53	1,265	387	Total Scope 1	4,096	3,464	3,598	3,261
	2021	2022	2023	2024																																		
Petrol	2	2	0	0																																		
Diesel	1,770	1,711	1,706	1,545																																		
Heating oil	560	29	71	8																																		
Natural gas	1,763	1,668	556	1,321																																		
Propane	0	53	1,265	387																																		
Total Scope 1	4,096	3,464	3,598	3,261																																		

Aspect	Indicator	Description	Comment/reference																
	GRI 305-2	Indirect energy-related GHG emissions (Scope 2)	<p>For Scope 2, the following emissions were taken into account:</p> <ul style="list-style-type: none"> <li>Indirect greenhouse gas emissions from the production of purchased electricity and district heating (production sites in Zug, Sulgen and Changzhou).</li> <li>The district heat produced by the Multi Energy Hub at the Zug site generates essentially no emissions, other than from the peak gas that is occasionally used.</li> <li>Low-emission Swiss hydroelectric power is used at Zug and Sulgen.</li> </ul> <p>Emissions in tonnes of CO<sub>2</sub> equivalent (Scope 2, market-based):</p> <table> <tr> <th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <td>244</td><td>225</td><td>145</td><td>280</td></tr> </table> <p>Emissions in tonnes of CO<sub>2</sub> equivalent (Scope 2, location-based):</p> <table> <tr> <th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <td>1,754</td><td>1,837</td><td>1,585</td><td>1,873</td></tr> </table> <p>See "<a href="#">Targets, facts and figures</a>", and the explanation of the Scopes for CO<sub>2</sub> neutrality in the chapter "<a href="#">Environment and climate protection</a>".</p> <p>Supplementary note:</p> <p>For the Zug production site and, since 2022, at the Sulgen production site, 100% hydropower has for many years been purchased (Swiss-sourced) in order to support the expansion of renewable energy. The CO<sub>2</sub> emissions are declared accordingly in line with the certificate of origin (market-based, as per the reporting regulations of the Greenhouse Gas Protocol).</p> <p>For reasons of comparability, the emissions of the power used (location-based) are also shown.</p> <p>This comparison is helpful in discussions regarding the known discrepancy between the power that is purchased and that which is actually used.</p> <p>The electricity consumption of electric vehicles is now also included in the calculation.</p>	2021	2022	2023	2024	244	225	145	280	2021	2022	2023	2024	1,754	1,837	1,585	1,873
2021	2022	2023	2024																
244	225	145	280																
2021	2022	2023	2024																
1,754	1,837	1,585	1,873																

Aspect	Indicator	Description	Comment/reference				
	GRI 305-3	Other indirect GHG emissions (Scope 3)	Screening emissions in tonnes of CO <sub>2</sub> (Scope 3):				
				2021	2022	2023	2024
			Purchased goods and services (1)	96,845 (22.4 %)	82,234 (19.7 %)	66,987 (19.8 %)	68,740 (22.2 %)
			Capital goods (2)	15,895 (3.7 %)	12,700 (3.0 %)	9,869 (2.9 %)	14,202 (4.2 %)
			Fuel and energy-related emissions (not included in Scope 1 or 2) (3)	1,593 (0.4 %)	1,050 (0.3 %)	950 (0.3 %)	1,163 (0.3 %)
			Upstream transportation and distribution (4)	4,148 (1.0 %)	4,434 (1.1 %)	3,427 (1.0 %)	2,176 (0.6 %)
			Waste (5)	1,048 (0.2 %)	812 (0.2 %)	975 (0.3 %)	1,064 (0.3 %)
			Business travel (6)	871 (0.2 %)	899 (0.2 %)	1,060 (0.3 %)	1,083 (0.3 %)
			Employee commuting (7)	1,273 (0.3 %)	1,375 (0.3 %)	1,289 (0.4 %)	1,264 (0.4 %)
			Upstream leased assets (8)	1,186 (0.3 %)	1,623 (0.4 %)	1,699 (0.5 %)	1,664 (0.5 %)
			Use of sold products (11)	300,833 (69.6 %)	304,048 (72.8 %)	244,824 (72.4 %)	238,229 (70.1 %)
			End-of-life treatment of sold products (12)	8,276 (1.9 %)	8,351 (2.0 %)	6,907 (2.0 %)	9,356 (2.8 %)
			Downstream leased assets (13)	87 (0.0 %)	91 (0.0 %)	91 (0.0 %)	1,038 (0.31 %)
			Total Scope 3 (screening)	432,057	417,617	338,078	339,979
			Change from previous year	-6.1 %	-3.3 %	-19.0 %	0.6 %
			Change from the baseline 2020, cumulative	-6.1 %	-9.2 %	-26.5 %	-26.1 %
			Scope 3 refers to the entire V-ZUG Group.				
			The categories "Downstream transportation and distribution" (9), "Processing of sold products" (10), "Franchises" (14) and "Investments" (15) were not recorded because they are of minimal relevance in our context.				



Aspect	Indicator	Description	Comment/reference
Operational waste management			
GRI 3-3		Management of material topics	See chapter <a href="#">“Products and services for a future-fit society”</a> , <a href="#">“Environment and climate protection”</a> and overview <a href="#">“Annex: Impacts, risks and opportunities”</a> .
GRI 306 Waste (2020)	GRI 306-1	Waste generation and significant waste-related impacts	<p>See chapter <a href="#">“Products and services for a future-fit society”</a>, <a href="#">“Environment and climate protection”</a> and overview <a href="#">“Annex: Impacts, risks and opportunities”</a>.</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"> <li>Environmental policy (Zug site)</li> </ul> <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"> <li>Hazardous goods checklist</li> </ul>
	GRI 306-2	Management of significant waste-related impacts	See chapter <a href="#">“Products and services for a future-fit society”</a> , <a href="#">“Environment and climate protection”</a> .

Aspect

Indicator

Description

Comment/reference

GRI 306-3

Waste generated

Waste by type (in tonnes):

Type of waste	2021	2022	2023	2024
Waste wood	688.4	738	396.7	128.2
Bulky industrial/commercial items	236.7	230	284.1	224.8
Plastics	45.3	166	183.1	202.8
Scrap metal	1,866.6	1,892	1,689.1	1,874.1
Paper/cardboard	528.9	668	648.1	615.7
Oils, fats, lubricants	14.0	3.6	2.4	3.2
Special waste	28.0	19.6	23.1	55.9
Returned household appliances <sup>1)</sup>	1,304.8	923.9	1,167.6	1,053.9
Other (old tyres, electrical waste, green waste)	26.2	24.3	24.7	192.5

<sup>1)</sup> This figure corresponds to the number of household appliances that customers returned to V-ZUG via its own service organisation. In the Swiss market (in 2024, approx. 85 % of V-ZUG appliances sold were sold in the Swiss market) virtually 100 % of the household appliances in circulation are returned for professional disposal (the collection rate is almost 100 %). Details regarding the collection rate and the recycling rate are published each year in the annual report of the SENS Foundation (tasked by manufacturers to organise the return and professional recycling of electrical appliances). V-ZUG plays an active role in the SENS Foundation, and CEO Peter Spirig sits on the Foundation's Board of Trustees.

Waste by disposal type:

Type of disposal	2021	2022	2023	2024
Recycled	79.6%	78.6%	81.7%	88.1%
Composted	0.3%	0.2%	0.3%	0.2%
Incinerated	19.5%	20.7%	18.0%	10.5%
Special case	0.6%	0.5%	0.6%	1.3%
Landfill	0%	0%	0%	0%

Scrap metal and returned household appliances are recycled and waste wood is incinerated. Hazardous waste (oils, fats, lubricants and other special waste) makes up a small proportion of the waste generated and is disposed of or recycled separately.

Aspect	Indicator	Description	Comment/reference																				
	GRI 306-4	Waste diverted from disposal	<div>Waste by disposal type in tonnes:</div> <table><tr><th>Type of disposal</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Recycled</td><td>3,770.3</td><td>3,666.8</td><td>3,717.0</td><td>3,933.0</td></tr><tr><td>Composted</td><td>15.1</td><td>11.0</td><td>10.3</td><td>9.1</td></tr></table> <div>Main recycling partner for returned appliances: Thommen Recycling, ISO 14001-certified.</div> <div>V-ZUG does not export any waste.</div>	Type of disposal	2021	2022	2023	2024	Recycled	3,770.3	3,666.8	3,717.0	3,933.0	Composted	15.1	11.0	10.3	9.1					
Type of disposal	2021	2022	2023	2024																			
Recycled	3,770.3	3,666.8	3,717.0	3,933.0																			
Composted	15.1	11.0	10.3	9.1																			
	GRI 306-5	Waste directed to disposal	<div>Waste by disposal type in tonnes:</div> <table><tr><th>Type of disposal</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr><tr><td>Incinerated</td><td>925.2</td><td>968</td><td>680.8</td><td>467.4</td></tr><tr><td>Special waste</td><td>28.0</td><td>19.6</td><td>23.1</td><td>55.9</td></tr><tr><td>Landfill</td><td>0</td><td>0</td><td>0</td><td>0</td></tr></table>	Type of disposal	2021	2022	2023	2024	Incinerated	925.2	968	680.8	467.4	Special waste	28.0	19.6	23.1	55.9	Landfill	0	0	0	0
Type of disposal	2021	2022	2023	2024																			
Incinerated	925.2	968	680.8	467.4																			
Special waste	28.0	19.6	23.1	55.9																			
Landfill	0	0	0	0																			
Biodiversity and ecosystems																							
GRI 3-3		Management of material topics	See chapter “ <a href="#">Products and services for a future-fit society</a> ”, “ <a href="#">Environment and climate protection</a> ” and overview “ <a href="#">Annex: Impacts, risks and opportunities</a> ”.																				
Entrepreneurship for sustainable prosperity																							
Responsible and resilient supply chain																							
GRI 3-3		Management of material topics	<div>See chapter “<a href="#">Entrepreneurship for sustainable prosperity</a>” and overview “<a href="#">Annex: Impacts, risks and opportunities</a>”.</div> <div>Published documents (accessible via website):</div> <ul style="list-style-type: none"><li>Environmental policy (Zug site)</li><li>Code of Conduct for Suppliers</li></ul> <div>Examples of relevant internal documents:</div> <ul style="list-style-type: none"><li>V-ZUG Group Code of Conduct</li><li>Supplier audit questionnaire</li><li>Supplier contract</li></ul>																				
GRI 204 Procurement practices (2016)	GRI 204-1	Proportion of spending on local suppliers	Around 60 % of V-ZUG’s suppliers are based in Switzerland, and another 30 % or so are located in nearby European countries. V-ZUG obtains most of the electronics components from highly specialised markets in Asia.																				

Aspect	Indicator	Description	Comment/reference								
GRI 308 Supplier environ- mental assessment (2016)	GRI 308-2a	Number of suppliers assessed for environmental impact	See <a href="#">“Targets, facts and figures”</a> in chapter “Entrepreneurship for sustainable prosperity”.								
GRI 414 Supplier social assessment (2016)	GRI 414-2a	Number of suppliers assessed for social impact	See <a href="#">“Targets, facts and figures”</a> in chapter “Entrepreneurship for sustainable prosperity”.								
Long-term corporate success as added value for society											
GRI 3-3		Management of material topics	See chapter <a href="#">“Entrepreneurship for sustainable prosperity”</a> and overview <a href="#">“Annex: Impacts, risks and opportunities”</a> .								
GRI 201 Economic performance (2016)	GRI 201-1	Direct economic value generated and distributed	See <a href="#">“Financial Report”</a> , 2024 Annual Report.								
GRI 203 Indirect economic impacts (2016)	GRI 203-1	Infrastructure investments and services supported	V-ZUG invests via various projects and partnerships in its production sites and a sustainable, integrated infrastructure, particularly at its main site in Zug (see Tech Cluster Zug) and with the new building for V-ZUG Kühltechnik AG in Sulgen.  See chapters <a href="#">“Environment and climate protection”</a> , <a href="#">“Entrepreneurship for sustainable prosperity”</a> and the <a href="#">“Real Estate” segment report</a> , 2024 Annual Report.								
Business ethics and compliance											
GRI 3-3		Management of material topics	See chapter <a href="#">“Entrepreneurship for sustainable prosperity”</a> and overview <a href="#">“Annex: Impacts, risks and opportunities”</a> . For embedding policy commitments, see “GRI 2-23” and “GRI 2-24”.								
GRI 415 Political influence (2016)	GRI 415-1	Political donations	V-ZUG does not make any politically motivated payments or donations such as lobbying to local, regional or national political campaigns, trade associations or tax-exempt groups.  Payments or donations in CHF: <table> <tr> <th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <td>0</td><td>0</td><td>0</td><td>0</td></tr> </table>	2021	2022	2023	2024	0	0	0	0
2021	2022	2023	2024								
0	0	0	0								

Aspect	Indicator	Description	Comment/reference
GRI 417 Marketing and labelling (2016)	GRI 417-1	Requirements for product and service information and labelling	V-ZUG adheres to laws and regulations regarding product and service information and labelling requirements worldwide
	GRI 417-2	Violations in connection with product and service information and labelling	No violations in the reporting year.
	GRI 417-3	Violations in connection with marketing and communication	No violations in the reporting year.
GRI 419 Socio-economic compliance (2016)	GRI 419-1	Non-compliance with laws and regulations in the social and economic area	V-ZUG complies with laws and regulations worldwide.
IT security and data protection			
GRI 3-3		Management of material topics	See chapter “ <a href="#">Entrepreneurship for sustainable prosperity</a> ” and overview “ <a href="#">Annex: Impacts, risks and opportunities</a> ”.
GRI 418 Protection of customer data (2016)	GRI 418-1	Justified complaints regarding breaches of customer data protection and loss of customer data	V-ZUG has not received any justified complaints regarding breaches of customer data protection or the loss of customer data.

# Climate Report (TCFD)

## Introduction

V-ZUG has been reporting in line with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) since the 2023 financial year. Focusing on the areas of governance, strategy, risk management, metrics and targets, we highlight the potential impact that the climate-related risks and opportunities identified by V-ZUG could have in a business context and outline how we approach this issue as an organisation.

We see sustainability as a holistic concept that encompasses our entire value chain on an ecological, social and entrepreneurial level. Responsible business is not just a passing fad for us; it is something that shapes our decision-making and the work we do on a daily basis. Since 2012, V-ZUG has published a Sustainability Report in accordance with the GRI Standards, including climate matters. This TCFD Report takes a more in-depth look at these environmental aspects.

## Governance

Sustainability is one of the four cornerstones of V-ZUG's corporate strategy. The corresponding sustainability strategy addresses topics in greater depth and shines a light on future-fit, sustainable corporate governance. Giving due consideration to the potential effects of climate change on our company's durability, resilience and business activities is a key part of this reporting process.

Our Board of Directors reviews and approves our corporate strategy. The Executive Committee develops and proposes the corporate strategy and oversees its implementation once it has been approved. The Board of Directors is also responsible for approving V-ZUG's medium- and long-term sustainability targets (focus topics for 2030) and the corresponding roadmap. It reviews these on a regular basis. Our "Environment and climate protection" focus topic outlines our Scope 1, 2 and 3 reduction targets for CO<sub>2</sub> emissions through to 2030 (baseline year 2020). It also describes our management approach and the measures we have taken, and

discloses the relevant key figures. Three times each year, our focus topics and the current status of our activities are discussed with the responsible members of the Executive Committee.

The Board of Directors receives a detailed update on the topic once a year as part of our sustainability and risk reporting processes, ensuring all members have a clear picture of where we stand and the progress we have made in terms of climate-related issues. This also enables us to review the progress of our sustainability targets, including climate targets.

Our Sustainability Report is drawn up by an interdisciplinary working group, led by the Head of Sustainability at V-ZUG. The CO<sub>2</sub> assessments in Scope 1 and 2, including offsetting measures, are also audited by an external body and confirmed in an assurance statement.

Our risk report is drawn up by the Executive Committee and reviewed and approved by the Board of Directors. The TCFD Report provides an in-depth analysis of climate change as a macro risk and is published in the Sustainability Report.

The Sustainability Report has been integrated into the Annual Report since the 2023 financial year. This not only strengthens the involvement of the entire Board, but also demonstrates the equal importance of financial and non-financial key figures. The Audit Committee of the Board of Directors reviews the Annual Report, with final approval given by the Board of Directors.

The Board of Directors is also informed about sustainability issues and any relevant decisions in the course of its ordinary meetings, which are held at least four times a year. The Executive Committee is also updated on specific points in its monthly meetings.

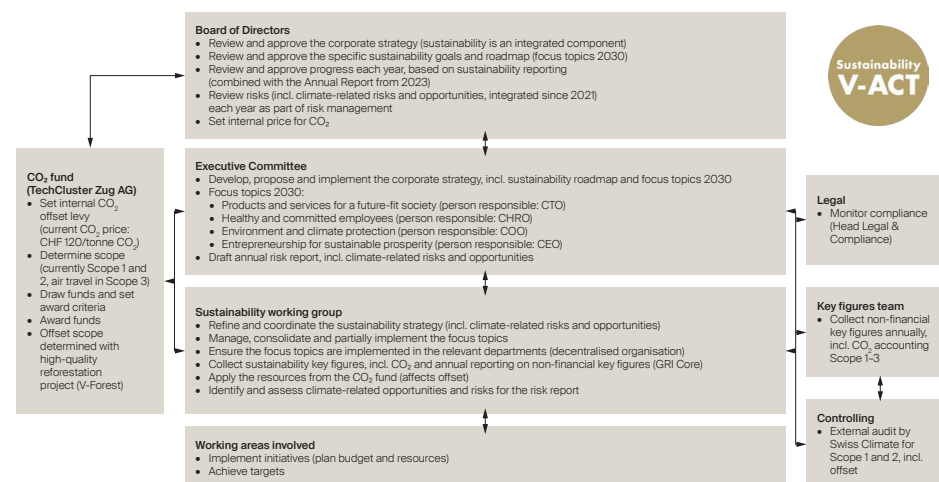
V-ZUG takes an interdisciplinary approach to sustainability management, with the topic implemented in various areas throughout the company, depending on the particular issues and opportunities. V-ZUG's decentralised Sustainability Workforce comprises representatives from a range of departments. Set up in 2020, the team implements our focus topics systematically in all corporate areas. The working group is led by the Head of Sustainability, who reports directly to the CEO. The Sustainability Workforce meets once a month to work on and steer our four



focus topics, coordinate our sustainability strategy (including climate-related risks and opportunities) and identify areas for further development. The collection of key sustainability figures (including CO<sub>2</sub>) and annual reporting on non-financial key figures (in accordance with the GRI Standards) are important tools for handling and reviewing sustainability topics. The materiality matrix is updated every three to four years (most recently in 2024).

As part of TCFD reporting activities, the risk-analysis process used to compile the annual risk report has been expanded to include more detailed climate-related risks and opportunities. The Sustainability Workforce undertakes this more in-depth, multifaceted risk evaluation in conjunction with experts from our Finance, Legal and Procurement departments, allowing us to assess the expected impact of different measures.

## Governance – overview



Corporate governance overview in relation to sustainability, V-ZUG, source: vzug.com

## Climate protection strategy

V-ZUG has identified potential climate-related risks and opportunities that could have an impact on the Group's operations, strategy and financial planning measures. In accordance with the recommendations of the TCFD, a distinction is made between physical risks, which may be acute or chronic, transition risks and climate-related opportunities.

**Physical risks** categorised as relevant by V-ZUG include extreme weather conditions, rising sea levels, floods and heat waves, and their potential consequences in terms of supply chains and employee productivity.

V-ZUG considers the following topics to be **relevant climate-related transition risks**: a lack of communication or exaggerated communication regarding climate protection (danger of green-washing), the failure to meet sustainability targets or implement climate-protection measures, the introduction/extension of a carbon tax for companies or ecodesign regulations and, finally, a change in consumer behaviour.

However, V-ZUG has also identified **certain opportunities associated with climate change**, including increased construction activity due to climate-related displacement, growing demand for sustainable household appliances, changes in consumer preferences with regard to greater sustainability and opportunities for new business models ("Share Economy", "Product as a Service", etc.). Further opportunities include the ability to build more resilient supply chains, increased attractiveness for employees due to changes in sustainability awareness, and differentiation from competitors in terms of sustainability (position as pioneer).

### Climate-related physical risks:

1. Extreme weather conditions (droughts, heavy rain and floods) and chronic changes to weather patterns (higher global temperatures and rising sea levels) have a negative impact on our supply chain.
2. Extreme weather conditions (severe heat and/or other weather events) could have a negative impact on employees' health and productivity levels.

### Climate-related transition risks:

- V-ZUG is perceived as a brand that does not take responsibility for climate protection and shows no accountability.
- In terms of communication, our approach to climate protection is exaggerated and perceived as greenwashing.
- We have defined ambitious climate targets and measures, but are unable to implement these as planned and fall short of our targets. This could be due to unexpectedly high costs or the fact that the measures themselves are not technically feasible.
- More stringent regulations are issued regarding ecodesign (energy efficiency, the circular economy, material impact, etc.).
- A CO<sub>2</sub> levy is introduced/extended for companies (already in place in Switzerland for heating oil and gas), which results in increasing costs (e.g. energy and materials).
- Increased climate awareness and higher consumption costs lead to a change in consumer behaviour.

### "Environmental and climate protection" focus topic – CO<sub>2</sub> emissions under the spotlight – management approach

V-ZUG is aware of its own responsibilities when it comes to climate-related issues and distinguishes between inside-out effects (i.e. the influence V-ZUG has on climate change) and outside-in effects (i.e. the influence of climate change on V-ZUG).

*Principle: prevent, reduce and offset – important tool:*

#### *internal CO<sub>2</sub> levy*

To minimise the effect our business activities have on the environment (inside-out), we adhere to the principle of "preventing, reducing and offsetting CO<sub>2</sub> emissions" (in order of priority). However, rather than simply targeting prevention or reduction at any cost, the goal must be to achieve progress in these areas in a way that makes good business and economic sense. V-ZUG therefore introduced an internal, voluntary CO<sub>2</sub> levy in 2018 in collaboration with Metall Zug AG (its former parent company prior to its public listing in the 2020 financial year). An annual offset levy of CHF 120 per tonne of CO<sub>2</sub> is applied to the remaining Scope 1 and 2 emissions and Scope 3 emissions from air travel and paid into our CO<sub>2</sub> fund. Money from the fund can then be put towards projects that are beneficial on an environmental level but are not yet economically attractive. The amount of the levy is determined by the Board of Directors together with Metall Zug AG and is used by the Sustainability Workforce to guide the actions taken in our various departments.

### *Investment in the V-Forest reforestation project in collaboration with the Ripa Gar Foundation*

V-ZUG has not yet been able to completely prevent CO<sub>2</sub> emissions along the entire value chain. The aim is to reduce direct emissions largely through own efforts; as such, targets have been set to be achieved by 2030 – and the measures needed to reach these targets have been identified and planned. V-ZUG has also been investing in a high-level climate protection project since 2020 to offset the remaining emissions (Scope 1 and 2 and air travel in Scope 3). This means that V-ZUG has achieved and maintained CO<sub>2</sub>-neutral production (including offsetting) for all Swiss-made appliances since 2020. The money required to offset our emissions is also taken from the CO<sub>2</sub> fund. For this project, we are working with the Ripa Gar Foundation to support a reforestation project in Scotland. This enables us to obtain high-quality carbon removal certificates to compensate for our remaining emissions. Working with a non-profit foundation with a long-term horizon is important to us, as it enables us to make a credible contribution to protecting the environment by investing in reforestation.

The "V-Forest" is located in Glen Lochay in the Scottish county of Perthshire. Working in accordance with the UK Woodland Carbon Code (WCC), the Ripa Gar Foundation has already planted 800,000 trees in an area equivalent to around 700 football pitches. The WCC is a government-backed standard in the UK for reforestation projects and offers independent verification and validation of the amount of CO<sub>2</sub> sequestered through a sustainable forestry project. Our contributions are helping to grow a native mixed woodland (42 % birch, 21 % pine, 16 % oak and other local species). Over the next 100 years, the areas already reforested will capture and store around 210,000 tonnes of CO<sub>2</sub>. The project is protected against forest fires, diseases and other risks. A total of 30 % of the certificates available for all WCC projects are held in a buffer and made available to everyone as a form of insurance should a risk materialise.

As well as sequestering CO<sub>2</sub>, the project has other positive side effects, such as increasing biodiversity, improving local water quality, restoring the moor landscape and helping to reduce the risk of flooding. This allows native flora and fauna to flourish, and nature to find its balance.

It would be difficult to realise a comparable project of this size in Switzerland. However, in addition to the space requirements, there were other reasons for choosing Scotland as a location, including its favourable climatic conditions (even with rising temperatures), good local institutions and the required expertise. It will take a little while before the CO<sub>2</sub> certificates from the "V-Forest" can be used directly to offset our emissions. The trees need to grow before they can capture and store the required amounts of CO<sub>2</sub>. Until then, the Ripa Gar Foundation is

supporting another reforestation project in India that captures an equivalent amount of CO<sub>2</sub> for each tonne of CO<sub>2</sub> generated. The project is certified according to the UN Framework Convention on Climate Change and is listed on the UN Carbon Offset Platform. The required amounts of CO<sub>2</sub> have already been captured. Our participation in this endeavour effectively offsets double the amount of our own emissions and means that V-ZUG has achieved and maintained CO<sub>2</sub>-neutral production for all Swiss-made appliances since 2020.

### Our approach to Scope 1 and 2 emissions

Our target for 2030 is to reduce the direct emissions generated at our production sites in Zug, Sulgen and Changzhou and those emitted by our vehicle fleets, including service vehicles and trucks (Scope 1), by 80 % compared to the baseline year of 2020. The same applies to indirect emissions from the generation of purchased electricity (market-based) and district heating (Scope 2). Our long-term ambition is to achieve a reduction of 100 %. This current near-term target (since 2020) was submitted to the Science Based Target initiative (SBTi) in the reporting year 2024 and will therefore be validated within the next two years (depending on the SBTi). Current status: "Committed".

With this bottom-up goal, V-ZUG thus intends to achieve a significantly greater reduction in CO<sub>2</sub> emissions than the recommendations of the SBTi: To limit the rise in global temperatures to 1.5°C, as stipulated in the Paris Agreement, an annual reduction in Scope 1 and 2 emissions of 4.2 percentage points is required over a period of five to ten years (42 % in total compared to the baseline year).

The most relevant measures we have adopted to reduce our Scope 1 and 2 emissions are as follows:

- V-ZUG Kühltechnik AG's new **production site in Sulgen**, which entered operation in 2022, boasts sustainable infrastructure (a groundwater heat pump which powers the heating system, energy-efficient building design and a photovoltaic system on the roof). This also means we no longer need the oil heating system at the old site in Arbon.
- With our **Multi Energy Hub** progressively supplying the V-ZUG site at our headquarters in Zug with renewable energy (photovoltaic systems, waste heat from production, groundwater and lake water), we will be able to eliminate the consumption of natural gas for heating at the site almost entirely in the coming years (from 2023 to 2027).

- The **site transformation at our headquarters in Zug** (which began in 2014 and will be largely completed by 2027) will see almost all the old production and administration buildings replaced with new, energy-efficient constructions. Several new, more energy-efficient production facilities will also be put into operation. This is expected to result in significant savings in terms of our electricity consumption.
- We are gradually reducing the CO<sub>2</sub> emissions of the **V-ZUG vehicle fleet** by switching from diesel vehicles to electric models. Our first batch of electric service vehicles (around 300 in total) went into operation in 2023, and 2024 saw the introduction of our first electric trucks (15 vehicles in total). The conversion of the truck fleet is being partially financed by our CO<sub>2</sub> fund.
- To support the **decarbonisation of industrial processes**, V-ZUG plans to use hydrogen in place of natural gas for certain processes in the future (e.g. to achieve the 850 °C necessary for the high-temperature enamelling process). V-ZUG is a founding member of the Association for the Decarbonization of Industry, which aims to create sustainable hydrogen using a new process (methane pyrolysis). The pilot plant is set to begin operations in 2024, with the ultimate goal being full-scale industrial production. Depending on the purity of the hydrogen produced, it may also be possible to use it to decarbonise V-ZUG's truck fleet further down the line. This project is being financed in part by the internal CO<sub>2</sub> fund.
- **Procuring renewable electricity:** For many years, 100 % hydropower has been purchased for the Zug production site (Swiss-sourced since 2022) to support the expansion of renewable energy. This approach has also been taken at the new production site in Sulgen since 2022. The CO<sub>2</sub> emissions are declared accordingly in line with the certificate of origin (market-based, as per the reporting regulations of the Greenhouse Gas Protocol). For reasons of comparability, the emissions of the power used (location-based) are also shown. This comparison is helpful in discussions regarding the known discrepancy between the power that is purchased and that which is actually used.

Thanks to the range of reduction measures we have implemented and the "V-Forest" project, which enables us to offset CO<sub>2</sub> emissions, production at V-ZUG has been CO<sub>2</sub> neutral since 2020.

### Our approach to Scope 3 emissions

In the 2020 financial year, V-ZUG carried out a holistic screening of its Scope 3 emissions for the first time. The Greenhouse Gas Protocol divides Scope 3 emissions into 15 categories, 11 of which were deemed relevant. Categories 9, 10, 11 and 14 were classified as not relevant. Our

indirect Scope 3 emissions levels are several times higher than our levels in Scope 1 and 2. Of the 11 relevant categories, two make up over 90 % of our Scope 3 emissions: category 1, Purchased goods and services (2020: 19.7 %), and category 11, Use of sold products (73 %). However, this does not mean that the other categories are less important, and we are actively targeting certain improvements in these other categories as well.

Based on this insight, V-ZUG developed a reduction schedule for Scope 3 emissions in 2022, with a focus on the two categories of 1 and 11. Our ambition is to reduce Scope 3 emissions by 30 % by 2030 compared to the baseline year of 2020. We use the term “ambition” quite deliberately where Scope 3 is concerned, since it relates to indirect emissions, and this is an area where V-ZUG often has only limited influence on the associated implementation (see measures below).

In SBTi terms, this ambition lies between a “1.5°C” target (requirement: –42 %) and a “well below 2°C” target (requirement: –25 %).

The most relevant measures we have adopted to **reduce our Scope 3 emissions** are:

- **Increasing energy efficiency** across all product categories. (Specific objective: increase fleet efficiency by 5 % by 2030 compared to the baseline year of 2020)
- Encouraging customers to use our appliances **in a more environmentally friendly manner** with corresponding features and handy tips
- Applying **circular economy principles** in product development (design-to-circularity principles)
- **Reducing our environmental footprint** by 5 % for new product development projects (measured using life cycle assessments [LCAs], in ecopoints [EPs])
- **Working together with suppliers** to apply circular economy principles and select low-carbon materials (e.g. recycled materials, low-carbon steel, material reduction)
- **Requiring suppliers** to reduce their own emissions. Part of V-ZUG’s Scope 3 emissions includes the Scope 1 and 2 footprint of its suppliers and subcontractors.
- **Market developments** make up a significant part of the reduction (20 %). Although these can be influenced only to a limited extent, they are still taken into account in our reduction schedule. The term “market developments” refers to the expansion of renewable energy and the associated reduction in emissions in those markets where our appliances are used, as well as the reduction in emissions from purchased goods. Estimates for both these developments have been made for the period up to 2030, based in part on commitments made by countries regarding the expansion of renewable energies.

V-ZUG is also taking additional actions that are relatively small in terms of the level of reduction achieved, but which are still considered highly important in terms of the message they send to employees and the general public.

- Introducing and enhancing our **mobility strategy** at our Zug site (approx. 1,000 employees) in 2018 to minimise motorised private transport.
- Applying **sustainable construction standards** (e.g. using wood as a construction material, recycled concrete) to minimise grey energy in our new buildings (transformation of our Zug and Sulgen sites).
- Working with suppliers to minimise **transport routes**. Approximately 60 % of our suppliers are based in Switzerland, 30 % in neighbouring countries and 10 % in Asia.
- **Professional disposal of waste** and the extensive return and recycling of household appliances at the end of their life cycle.
- Using our **CO<sub>2</sub> Webshop**, our customers can offset the emissions that result from using their appliances. These contributions are put towards the “V-Forest” reforestation project.

#### Long-term “2050 net-zero target” according to the definition by SBTi

V-ZUG deliberately abstains from the use of a long-term 2050 net-zero target as defined by SBTi. A distinction between direct emissions in Scope 1 and 2 and the large dependencies in the indirect Scope 3 must be taken into account. From today’s perspective, a target would therefore not be credible and would not reflect V-ZUG’s values such as “reliability”.

In Scope 1 and 2, from today’s perspective, V-ZUG will almost certainly reach net zero by 2050 (likely even earlier, see the goal for 2030). This is now also a requirement of the new Swiss CO<sub>2</sub>-Act, which will enter into force in 2025. Mathematically, we have been net zero in CO<sub>2</sub> since 2020, taking into account offsetting with removal certificates (see above, V-Forest). This is the case when the definitions of the Intergovernmental Panel on Climate Change (IPCC) are applied (see glossary, “net zero CO<sub>2</sub>”). If a net-zero target by 2050 were definable for Scope 1 and 2, V-ZUG would be prepared to implement it immediately. However, SBTi only provides for all three scopes.

In Scope 3, V-ZUG is committed to moving forward with ongoing and planned measures that can be implemented autonomously and independently. In particular, this involves increasing the energy efficiency of the appliances and reducing the environmental footprint from the purchased materials. Solutions for the upstream and downstream value chain are being sought and implemented in this context. For a material-intensive company such as V-ZUG, cooperation with suppliers in the area of the circular economy is crucial. In addition, household

appliances consume electricity during use. For this reason, V-ZUG is reliant on the entire electricity production to be switched to renewable energy in the served markets by 2050. While we are very confident that this will occur, the implementation is outside the control of V-ZUG. For example, as a country, China has set itself the goal of being net zero by 2060. As a result, V-ZUG would not be able to reach its target by 2050. No longer selling any appliances in these markets would not be appropriate, as this would only open the market for less sustainable appliances. From today's perspective, it is also unrealistic to expect that the appliances will no longer consume electricity by 2050 or that they will produce the required electricity themselves in a renewable manner.

## Risk management

### The general risk management process at V-ZUG

Risk management is a key component in V-ZUG's management system. It is used to identify risks and opportunities and initiate measures. The Board of Directors bears overall responsibility for structuring the entire risk management process and ensuring its effectiveness. The risks associated with climate change are a key component in the risk management process and are included in the risk report as a macro risk. These **macro risks** are defined as risks that pose a "fundamental threat to the continued existence of V-ZUG" over a long-term horizon (ten years or more). This is a clear sign that V-ZUG considers climate-related risks to be both urgent and significant issues. A distinction is also made from **business continuity risks**, which have a short- to medium-term horizon (one to five years).

The **risk management process** implemented at V-ZUG includes various stages and tasks:

1. **Risk identification:** Every three years, a systematic, detailed bottom-up risk-identification process is carried out based on the previous year's V-ZUG Group risk report. In the two years in between, a top-down process is followed. The monitoring of opportunities also forms part of the risk management process.
2. In the subsequent **risk analysis** stage, the identified risks are assessed in terms of their likelihood of occurrence and impact. This information is then used to determine the risk factor.

3. **Risk control:** This stage involves defining strategies and measures to manage the identified risks. Within the V-ZUG Group, the Board of Directors and Audit Committee are chiefly responsible for managing risks and addressing macro risks.

4. **Risk reporting and risk monitoring:** The Executive Committee compiles an annual risk report detailing the results of the identification, assessment and control processes that have been carried out. Individual members of the Executive Committee are responsible for reviewing compliance with and implementation of the defined risk management measures. The entire Executive Committee also takes due note of these actions. In addition, a status report on measures which have already been implemented is submitted to the Audit Committee and Board of Directors.

### Specific risk management process for climate-related risks

When identifying and evaluating climate-related risks as part of the TCFD Report, we proceed in accordance with our general risk process (outlined above). This report represents a more in-depth risk evaluation. It was carried out by the Corporate Sustainability team in conjunction with the Sustainability Workforce and experts from our Finance, Legal and Procurement departments. The relevant climate-related risks were identified in a series of workshops. These risks were then categorised into physical risks and transition risks. Finally, climate-related opportunities were derived. As such, the TCFD Report is an extension of our existing risk management process. Although it is included in this process, it is published separately as part of our annual Sustainability Report.

### Procedure for conducting a scenario analysis of climate-related risks

V-ZUG conducted a scenario analysis to determine the resilience of its corporate strategy in the event of various climate scenarios. In a series of workshops, eight identified risks and the impact they would have on our corporate strategy were analysed and evaluated with the aid of internal experts from the departments involved. We used climate scenarios defined by the Network for Greening the Financial System (NGFS) and recommended by the TCFD. To conduct the scenario analysis as part of our TCFD reporting, we analysed the "Orderly/Below 2 °C" and "Hot House/Current Policies" scenarios and assessed the separate risks identified in each scenario.

1. The **“Orderly/Below 2 °C” scenario** envisions a future in which climate policies are introduced early in a global context. These measures become gradually more stringent and are implemented on a systematic basis. As a result, there is a 67 % probability of global warming being kept below 2 °C by 2070. Both physical and transition risks are relatively subdued.
2. The **“Hot House/Current Policies” scenario** describes a situation in which no new climate policies are added to those that have already been adopted. This scenario assumes a global temperature rise of 3 °C or more on average by 2080, in line with scientific calculations. The potential physical risks are high in this climate scenario. Owing to the lack of (additional) climate policies, low transition risks can be assumed.

By considering these different climate scenarios separately, we can identify the expected impact on the company in each case. We can also review our sustainability targets and measures in light of how quickly or slowly climate change is progressing and make adjustments as and where necessary.

The probability of each risk and its impact on the company was assessed separately on a scale of one to ten in both scenarios. We also conducted an additional assessment for each scenario before/without and after adoption of the relevant measures. Once we had these two values, we multiplied them to determine the risk factor in each case. The procedure mirrors the risk analysis process used to assess business continuity risks in V-ZUG’s annual risk report.

The following table lists the identified climate-related risks and opportunities, their impact, the measures V-ZUG has taken and the risk factors from the scenario analysis.

Physical risks:

Physical risks are the result of gradual changes in climatic conditions and extreme weather events.

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
Acute/chronic			
<p><b>Risk 1:</b> <b>Extreme weather conditions</b> (droughts, heavy rain, floods) <b>and chronic changes to weather patterns</b> (higher global temperatures, rising sea levels) could have a negative impact on our supply chain.</p>	<p><b>Risk:</b> Climate change causes an <b>increase in the average global temperature</b>, which may result in extreme (localised) weather events such as droughts, heat waves, heavy rain, floods and rising sea levels.</p> <p>Certain essential <b>components</b> in V-ZUG products (e.g. electronics) are produced in distant countries, some in regions which are more at risk of experiencing extreme weather events.</p> <p>Should any of these extreme weather events occur at one of the sites in our supply chain, this could lead to <b>regular disruptions in deliveries and a lack of components (or drive up the prices of components)</b>, which would have a negative impact on production and net sales.</p> <p><b>Opportunity:</b> By identifying potential problem regions early on and making the necessary adjustments to our sources of supply, we can limit the impact of supply bottlenecks. This will also make V-ZUG more resilient to future changes to the supply situation.</p> <p><b>Opportunity:</b> Climate change may require some residential areas to be relocated, leading to an increase in global construction activity. For V-ZUG, this could mean an increase in demand for its household appliances.</p> <p><b>Opportunity:</b> V-ZUG could ensure ongoing future demand for its appliances by adapting its portfolio/range of products in line with the realities of climate change (e.g. producing air-conditioning appliances).</p>	<p><b>Minimising risk and exploiting opportunities:</b></p> <ul style="list-style-type: none"> <li>• <b>Rethink our supply chain</b> or make it more resilient: <ul style="list-style-type: none"> <li>• Greater focus on production in Switzerland</li> <li>• Shortening of our supply chain</li> <li>• Secondary/tertiary sources of supply, increased stockpiling (consider recent issues in the supply chain due to geopolitical challenges and effects/after-effects of COVID-19)</li> </ul> </li> <li>• <b>Make an active contribution</b> to limiting global warming to 1.5°C (as per Paris Agreement) by doing the following: <ul style="list-style-type: none"> <li>• Implementing our <b>sustainability targets</b> and ensuring regular reviews and adjustments</li> <li>• <b>Reducing our Scope 1 and 2 emissions</b> by 80 % by 2030 and reducing <b>Scope 3 emissions by 30 % by 2030</b></li> <li>• <b>Promoting and supporting the expansion of the circular economy</b> (taking back appliances, reusing components, etc.) will help make us more resilient to changes in the supply chain</li> </ul> </li> </ul>	<p><b>1.5– 2°C scenario:</b> Before/without measures: <b>12</b> After measures: <b>4</b></p> <p><b>3°C scenario:</b> Before/without measures: <b>64</b> After measures: <b>8</b></p>



Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<p><b>Risk 2:</b> <b>Extreme weather conditions</b> (severe heat and/or other weather events) could have a negative impact on <b>employees' health and productivity levels</b>.</p>	<p><b>Risk:</b> If employees are <b>less productive</b> due to prolonged periods of heat (or other extreme weather events) or are <b>absent</b> more often for health reasons, this could potentially reduce our profitability (presenteeism and more stress).</p> <p>V-ZUG will also have to reckon with increased <b>adaptation costs</b> (e.g. cooling systems, costs for absences due to illness) and higher <b>insurance costs for assets and staff</b>, which may drive up production costs in general.</p> <p><b>Opportunity:</b> As a company that is committed to sustainability and future-focused transformation, V-ZUG could become increasingly <b>attractive as an employer for potential employees</b>.</p>	<p><b>Minimising risk and exploiting opportunities:</b></p> <ul style="list-style-type: none"> <li>• <b>Focus topic: Healthy and committed employees</b> with clearly defined sub-targets, particularly: <ul style="list-style-type: none"> <li>• Focusing on the <b>long-term health</b> of our employees (target: stabilise the absence rate by 2025 and lower it over the long term)</li> <li>• <b>Occupational safety</b> (target: vision "zero" and 5% annual reduction in the number of accidents)</li> </ul> </li> <li>• <b>Site transformation at our headquarters in Zug and the new refrigerator factory building in Sulgen:</b> new buildings with cooling systems have a positive impact on employee health and productivity levels</li> </ul>	<p><b>1.5– 2°C scenario:</b> Before/without measures: <b>24</b> After measures: <b>6</b></p> <p><b>3°C scenario:</b> Before/without measures: <b>64</b> After measures: <b>25</b></p>



## Transition risks:

Transition risks arise gradually as part of the shift towards a low-carbon economy, for example through higher costs for emissions, mandatory reporting and repricing.

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
Aspiration/reputation			
<b>Risk 3:</b> V-ZUG is perceived as a brand that <b>does not take responsibility for climate protection</b> and shows no <b>accountability</b> .	<b>Risk:</b> There is a lack of clear communication regarding the climate-protection measures that have already been implemented, which leads to the V-ZUG brand being criticised for not doing enough to reduce its carbon footprint. The criticism that V-ZUG is not implementing any corporate measures related to climate protection could potentially damage the company's reputation, result in less business and see consumers switch to rival brands.  <b>Opportunity:</b> By ensuring transparent, thorough communication of the sustainability measures and targets already implemented or planned, V-ZUG can show accountability as a company and differentiate itself from other brands.	<b>Minimising risk and exploiting opportunities:</b> <ul style="list-style-type: none"> <li>• <b>Greater emphasis on external communication</b> regarding climate-protection measures already implemented or planned: <ul style="list-style-type: none"> <li>• Particular focus on the key <b>role that sustainability plays</b> in our corporate strategy and production and development processes</li> <li>• Communicate our <b>sustainability targets</b>, reduction targets, Scope 1, 2 and 3 (approach: prevent, reduce and offset)</li> </ul> </li> <li>• Streamline and consolidate the process for <b>documenting</b> all V-ZUG's efforts in the area of corporate sustainability to make transparent external communication easier</li> <li>• <b>Gradually expand</b> our sustainability communications to previously unused <b>channels</b> (e.g. social media, intranet, apps, employee onboarding, operating instructions, website)</li> <li>• <b>Regularly review</b> the information being communicated to ensure it is consistent and up to date with the sustainability measures actually implemented/planned</li> </ul>	<b>1.5– 2 °C scenario:</b> Before/without measures: <b>25</b> After measures: <b>4</b>  <b>3 °C scenario:</b> Before/without measures: <b>49</b> After measures: <b>9</b>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<p><b>Risk 4:</b> Our <b>approach to communication</b> on climate protection measures is <b>exaggerated</b> and perceived <b>as</b> greenwashing.</p>	<p><b>Risk:</b> The criticism/public perception that V-ZUG talks a lot about climate protection but does not implement any real measures could damage the company's reputation, mean less business and see consumers switch to rival brands. There is a risk that V-ZUG will be held accountable by private claimants.</p> <p><b>Opportunity:</b> By continuing to implement its current and planned sustainability measures, V-ZUG can enhance its reputation and differentiate itself from its competitors.</p>	<p><b>Minimising risk and exploiting opportunities:</b></p> <ul style="list-style-type: none"> <li>• <b>Transparent, serious and truthful</b> communication regarding our projects and successes (avoiding exaggeration; transparency leads to comparability among companies and increases trust):</li> <li>• Transparency through annual reporting on <b>Scope 1, 2 and 3 emissions in our Sustainability Report</b> in accordance with global standards (GRI, GHG Protocol).</li> <li>• Orientation toward and alignment with relevant recommendations and requirements (e.g. SBTi, CDP)</li> <li>• Monitoring the regulatory environment (e.g. EU Green Claim Directive)</li> <li>• <b>External validation</b> of Scope 1 and 2 emissions and offsetting measures to achieve CO<sub>2</sub>-neutral status at our production sites (Swissclimate)</li> <li>• <b>Prioritising</b> clear, truthful presentation and communication of the climate-protection measures that V-ZUG is currently implementing and intends to implement in the future.</li> <li>• <b>Clear presentation and explanation</b> of the approach taken and the significance of the targets/measures (e.g. offsetting with V-Forest)</li> </ul>	<p><b>1.5–2 °C scenario:</b> Before/without measures: <b>63</b> After measures: <b>4</b></p> <p><b>3 °C scenario:</b> Before/without measures: <b>80</b> After measures: <b>9</b></p>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<p><b>Risk 5:</b> We have defined <b>ambitious climate targets</b> and measures but are <b>unable to implement these as planned and fall short of our targets</b>. This could be due to unexpectedly high costs or the measures not proving to be technically feasible.</p>	<p><b>Risk:</b> The criticism that we define climate-related targets and measures but are unable to implement them has consequences. This could damage the company's reputation, mean less business and see consumers switch to rival brands.</p> <p><b>Opportunity:</b> By ensuring that the targeted implementation of climate-related measures remains a priority and an important point of reference in the corporate strategy, we can expect to stay one step ahead of the competition.</p>	<p><b>Minimising risk and exploiting opportunities:</b></p> <ul style="list-style-type: none"> <li>Having the clear target of reducing Scope 1, 2 and 3 emissions ensures a focused approach. Annual reporting on this area in our Sustainability Report (included in the Annual Report as of 2023) enables us to review our progress toward: <ul style="list-style-type: none"> <li>Reducing our Scope 1 and 2 emissions by 80 % by 2030</li> <li>Reducing Scope 3 emissions by 30 % by 2030</li> </ul> </li> <li>Our voluntary, internal CO<sub>2</sub> fund enables us to make ecologically sensible investments (e.g. e-trucks to reduce our CO<sub>2</sub>emissions)</li> <li>Regularly reviewing/monitoring our climate-protection measures and sustainability targets to ensure they are both relevant and feasible. This means making adjustments where necessary to maintain/achieve feasibility as far as possible</li> <li>Prioritising <b>the clear, truthful representation and communication</b> of climate-protection measures</li> </ul>	<p><b>1.5–2 °C scenario:</b> Before/without measures: <b>30</b> After measures: <b>2</b></p> <p><b>3 °C scenario:</b> Before/without measures: <b>42</b> After measures: <b>6</b></p>
Regulatory/statutory			
<p><b>Risk 6:</b> More stringent <b>regulations are issued</b> regarding <b>ecodesign</b> (energy efficiency, the circular economy, material impact, etc.).</p>	<p><b>Risk:</b> New or additional guidelines on ecodesign could be issued in the following areas: energy efficiency, circular product design, material impact, return and recycling obligations, material declarations and the proportion of recycled materials.</p> <p>The compliance with and implementation of these guidelines leads to higher product development costs.</p> <p><b>Opportunity:</b> By continuing to make increased investments in developing and producing ever more energy-efficient appliances, we are able to maintain a high-quality product range and ensure compliance with ecodesign guidelines without sudden cost increases.</p>	<p><b>Minimising risk and exploiting opportunities:</b></p> <ul style="list-style-type: none"> <li>Conduct regular <b>reviews</b> to assess which new/more stringent ecodesign guidelines are likely to be issued in the near future and affect us.</li> <li>The focus must always be on <b>developing sustainable products, regardless of any new regulations entering into force:</b> <ul style="list-style-type: none"> <li>Pursuing a systematic <b>investment strategy</b> that enables future-fit innovations and efficiency gains</li> <li>Using innovations and targeted guiding principles (energy efficiency, circular economy principles in product development, etc.).</li> </ul> </li> <li>Research and development costs amounted to roughly 10 % of net sales in 2022. Thanks to these investments in innovation, we are well positioned to accommodate more stringent ecodesign guidelines.</li> </ul>	<p><b>1.5–2 °C scenario:</b> Before/without measures: <b>48</b> After measures: <b>32</b></p> <p><b>3 °C scenario:</b> Before/without measures: <b>72</b> After measures: <b>54</b></p>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<b>Risk 7:</b> A CO <sub>2</sub> levy for companies is introduced/expanded (already in place in Switzerland for heating oil and gas, potential extension).	<b>Risk:</b> Higher or expanded carbon taxes could lead to additional costs for the company.  The introduction/increase of carbon taxes would also lead to large-scale rises in the prices of goods and services and, by the same token, reduce consumer (future) purchasing power.  <b>Opportunity:</b> V-ZUG could be seen as something of a pioneer (voluntary internal CO <sub>2</sub> levy introduced in 2018), which has a positive impact on the company's reputation and generates additional business.	<b>Minimising risk and exploiting opportunities:</b> <ul style="list-style-type: none"> <li>Monitoring upcoming ESG regulations and requirements on an ongoing basis</li> <li>Adjusting the <b>corporate strategy accordingly</b></li> <li>Voluntary internal CO<sub>2</sub> levy introduced in 2018 (Scope 1 and 2 plus air travel) (rate: CHF 120 per tCO<sub>2</sub>).</li> <li>As such, part of the potential tax is already reflected in our <b>budget and financial planning measures</b>.</li> </ul>	<b>1.5–2 °C scenario:</b> Before/without measures: <b>42</b> After measures: <b>28</b>  <b>3 °C scenario:</b> Before/without measures: <b>64</b> After measures: <b>48</b>
<b>Market:</b>			
<b>Risk 8:</b> Increased climate awareness and higher consumption costs lead to a change in <b>consumer behaviour</b>	<b>Risk:</b> This may lead to a drop in consumer purchasing power or see consumers buying fewer, cheaper or smaller products, leading to a slump in sales. There is also the danger of stigmatisation, meaning that consumers steer clear of certain types of products (e.g. tumble dryers, wine coolers).  <b>Opportunity:</b> Our “Shared Economy” and “Product as a Service” models or “Second Life/Refurbishment” could provide alternatives for consumers who do not want to purchase their own appliance or cannot afford to do so. By offering these types of business models, V-ZUG can be confident of gaining an advantage in the market.  <b>Opportunity:</b> If energy prices increase, household appliances with sustainable features will likely have a (competitive) advantage over less energy-efficient models.	<b>Minimising risk and exploiting opportunities:</b> <ul style="list-style-type: none"> <li>By conducting regular reviews, we can ensure that V-ZUG's range of products matches the interests and requirements of our target groups. We can also make adjustments if necessary to ensure products remain competitive over the long term.</li> <li>Early promotion and further development of new business models such as “Shared Economy”, “Product as a Service” and “Second Life”.</li> <li>By pursuing a systematic investment strategy, we can ensure future-fit innovations and efficiency gains.</li> </ul>	<b>1.5° C – 2° C scenario:</b> Before/without measures: <b>16</b> After measures: <b>4</b>  <b>3 °C scenario:</b> Before/without measures: <b>35</b> After measures: <b>10</b>

Overview of climate-related risks, opportunities, the impact on V-ZUG, associated measures and the results of our scenario analysis

### Implications:

If measures are not implemented, V-ZUG sees the greatest risk potential in the 1.5–2°C scenario for the transition risks of greenwashing, more stringent ecodesign guidelines and the expansion of a carbon tax. In the 3°C scenario without measures, delivery disruptions due to extreme weather conditions and health-related decreases in the productivity of employees are also seen as considerable risks. However, it is also clear that the impact of these risks can be significantly reduced by the measures currently in place at V-ZUG and the further measures that the company plans to implement. In terms of the 1.5–2 °C scenario, we expect that V-ZUG's measures can reduce the risks of more stringent ecodesign guidelines and carbon taxes to a moderate level, while all other risks can be reduced to a low level. Even in the 3°C scenario, we assume the measures we have outlined would achieve a clear reduction in the level of risk, albeit not to the same extent.

### Financial impact:

Given the high level of uncertainty regarding the progression of climate change and lack of previous experience, while we can provide a scaled estimate as to the extent of the impact on our business, we cannot quantify the financial effects in any meaningful way.

The investments required to minimise risks and exploit opportunities are either realised in our current budget (e.g. increasing efficiency in our appliances, existing R&D budget and correct focus) or co-financed through the CO<sub>2</sub> fund (e.g. decarbonisation of our truck fleet, hydrogen production).

## Metrics and targets

The targets we have identified, the progress made towards achieving them and information on our emissions are outlined in the [“Environment and climate protection” focus topic](#). Details can also be found in the appendix under [“Targets and status”](#) and the [GRI index](#).

# Due diligence obligations in the supply chain (DDTrO)

## Information on due diligence obligations and transparency in relation to minerals and metals from conflict-affected areas and child labour (DDTrO), based on Article 964j et seq. of the Swiss Code of Obligations (CO)

With our long-standing commitment to responsible procurement practices, we welcome the introduction of Switzerland's new Supply Chain Act (DDTrO), which set out the due diligence and transparency requirements in relation to minerals and metals from conflict-affected areas and child labour.

In light of the DDTrO, we are providing the following additional information:

### Concerning conflict materials

The V-ZUG Group does not procure any minerals or metals in the specified characteristics that would be subject to reporting requirements under the DDTrO. This is reviewed annually by the Procurement department using the customs tariff numbers of the specific materials indicated in the Annex to the DDTrO.

We are therefore not subject to any due diligence or reporting obligations in this regard in accordance with the Swiss Code of Obligations (CO).

Our suppliers are also required by our Code of Conduct for Suppliers to disclose any relevant information on this topic to us using the IntegrityNext self-declaration platform.

### Concerning child labour

Due diligence obligations concerning human rights, and child labour in particular, have always been part of supplier management at V-ZUG. Our management approach includes our Code of Conduct for Suppliers (including a reporting point), which forms an integral part of all agreements with our suppliers. We also require our suppliers to complete a self-declaration using

the IntegrityNext platform and conduct regular supplier audits on site. These supplier audits are carried out by V-ZUG employees or one of our partner companies. Further information is provided in our [“Entrepreneurship for sustainable prosperity”](#) focus topic, including key figures and targets related to audits.

Having completed a risk assessment using UNICEF's Children's Rights in the Workplace Index, we can confirm the following results:

According to the information provided by our suppliers on the country of origin, we do not work with any suppliers from critical countries and do not source any materials/modules from critical countries (classification: “Heightened”). We spend 73% of expenditure in materials/modules in countries with only a low level of risk exposure to child labour (classification: “Basic”). We spend the remaining 27% of expenses in countries with an increased risk of child labour (classification: “Enhanced”). We update this risk assessment annually based on our purchasing volume and import data

The reviews carried out as part of the regular on-site audits (“Supplier audit questionnaire” appendix) and the self-declarations (using the IntegrityNext platform) gave us no reason to suspect the use of child labour. We also received no reports via the reporting point during the reporting period (integral part of the Code of Conduct for Suppliers, section 6: Reporting point).

# Targets and status

Focus topic: Products and services for a future-fit society

Targets	Baseline and target years	2024 results	Status	Metrics
Efficiency				
<p>Increase fleet efficiency of all appliances (energy and water) by 5 %</p> <p>Updated 2024: Energy: Increase by 10 %</p>	2021; 2030	<p>Fleet efficiency/energy</p> <p>2021: 231 kWh/year</p> <p>2022: 229 kWh/year</p> <p>2023: 219 kWh/year</p> <p>2024: 207 kWh/year</p> <p>(9.61% increase in efficiency vs baseline year)</p> <p>Newly launched appliances (dishwashers, refrigerators) with improved energy efficiency and shift of product mix in other categories led to a marked increase in fleet efficiency (+5.48 % over the previous year) in energy.</p> <p>Fleet efficiency/water</p> <p>2021: 6,830 l/year</p> <p>2022: 6477 l/year</p> <p>2023: 6836 l/year</p> <p>2024: 7025 l/year</p> <p>(Acceptance of 8.5 % compared to the baseline, decrease of 2.8% compared to the previous year)</p> <p>The water efficiency indicator has little informative value as the three relevant categories exhibit annual consumptions that differ greatly from each other: (WA Unimatic, approx. 37,000 l, WA Adora, approx. 9,000 l, GS Adora, approx. 2,700 l). The average value therefore varies/fluctuates depending on the mix of products sold. In the coming years, we plan to provide a breakdown by category so that meaningful information can be provided.</p>	<p>Energy: Achieved (since 2023)</p> <p>Water: On track</p>	<p>Fleet efficiency: all appliances purchased multiplied by the respective annual water and energy consumption (acc. to energy label or, if not available, own calculation), divided by the number of appliances.</p> <p>The indicator is a calculated average V-ZUG appliance, across all product categories.</p>

Targets	Baseline and target years	2024 results	Status	Metrics
One appliance per product category in top 3 for efficiency (comparison site <a href="#">TopTen.ch</a> )	Annual review	<p>Washing machines: Energy: 1. /Water: 7. Tumble dryers: Energy: 1. Ovens: Energy: 2. Steamers: Energy: 1. Dishwashers: Energy: 1. /Water: 1. Fridge-freezers: Energy: 4. Refrigerators with freezer compartment: 5. Range hoods/island: Energy: 5. Range hoods/downdraft: 14. Range hoods/flat: Energy: 7.</p> <p>In top 3 in 6 out of a total of 12 categories: 50 % target attainment.</p> <p>If only the main categories are considered, the target is achieved in 5 out of a total of 7 categories. A number of projects are being carried out or set up that will improve efficiency in the extractor and refrigerator categories in the future.</p>	Not achieved	Ranking from comparison site <a href="#">TopTen.ch</a> – as at: December 2024
All our current network-enabled appliances have extensive integrated eco-functions/ services	n.a.; 2025	<p>Current functions in 2024 (selection, not exhaustive):</p> <ul style="list-style-type: none"> <li>EcoManagement: usage data displayed, predicted and actual values (multiple categories) – now also with list view in the V-ZUG-Home app</li> <li>OptiDos washing machines: optimised, economical detergent dosage</li> <li>OptiTime: if speed is not important. Long running time with maximum energy and water efficiency.</li> <li>Wide-ranging electricity saving campaign run via V-ZUG-Home app; eco-functions available – upgradable, with focus on digital technology</li> </ul>	On track	Cannot be quantified – will continue to be stated qualitatively for the time being



Targets	Baseline and target years	2024 results	Status	Metrics
Circularity				
Life cycle assessments for all appliances (one reference model per category)	n.a.; 2023	<p>Method established at the company, additional resources created in Development (Sustainability Expert Engineering)</p> <p>11 of 11 categories done</p> <p>Target achieved and exceeded. Total of 32 LCAs created (multiple appliances per category). Basis for product development and now also for Scope 3 recording in the "Purchased goods and services" category.</p> <p>Included in the standard process. Data is updated on an ongoing basis in the event of changes in the range. Data will be published in 2025 on the V-ZUG website.</p>	Achieved (since 2023)	<p>No. of appliances (reference model) per category</p> <p>Total categories: 11 (steamers, ovens, drawers, microwaves, CoffeeCenters, hobs, range hoods, dishwashers, refrigerators, washing machines, tumble dryers)</p>
Achieve 90 % recyclability of appliances	Development projects; 2025	<p>No project completed yet.</p> <p>Method worked out in theory and validated with recycling companies (washing machines and refrigerators)</p> <p>Status quo across all categories with LCA recording carried out in 2023. Recycling rate between 77 % (hob) and 97 % (refrigerator).</p> <p>Background: The recycling rate depends on the method of recycling used. The more circular economy principles we introduce, the higher the rate will be.</p> <p>First major project using the method</p> <p>Implemented in product requirements and development process for all projects</p>	On track	Recycling and reuse rate per product (anchor product)
Reduce ecopoints (EPs) by 5 %	Development projects; 2030	<p>Completed refrigerator project in 2023, achieving the goal: EP EoL reduced by -20 %. Although the new model has a larger footprint in terms of materials (consideration: assembled, especially insulation, +39 % UBP), its EPs are substantially reduced due to the reduced energy consumption in use (consideration: end-of-life, EoL).</p> <p>Further major project using the method; initial projection at milestone 30 (completion of concept phase) is promising. No completed projects (new developments) in 2024.</p> <p>Implemented in product requirements and development process for all projects</p>	On track	When developing new products compared to predecessor model
All appliances developed according to circular design principles	Development projects; 2030	<p>No project completed yet.</p> <p>Core element: design-to-circularity principles</p> <p>Method worked out and introduced, being applied in first major project; included in milestone analysis</p> <p>Implemented in product requirements and development process for all projects</p>	On track	Application of principles, success measurable as fewer EPs in LCA

Targets, results and status in relation to the focus topic "Products and services for a future-fit society"

Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

# Targets, facts and figures

## Focus topic: Resilient and committed employees

Targets	Baseline and target years	2024 results	Status	Metrics
Occupational safety: vision "zero" and 5 % annual reduction in the number of accidents	Annually	<p>Workplace accidents 2021: 89</p> <p>Workplace accidents 2022: 88</p> <p>Workplace accidents 2023: 75</p> <p>Workplace accidents 2024: 91</p> <p>16 more workplace accidents than 2023 – 21 % increase.</p> <p>V-ZUG recorded 91 occupational accidents during the reporting year (previous year: 75). These generated a total of roughly 9,523 lost hours, or 0.32 % of contracted hours (2023: 0.24%). V-ZUG put targeted measures in place and raised awareness of hazards in the workplace and correct conduct across the company. Nevertheless, the goal of reducing accidents every year has not been achieved. In 2025, efforts will be stepped up further.</p> <p>Awareness-raising measures: 2021: Tripping and Falling, 2022: Cuts and bruises, 2023: Lifting and Carrying, 2024: Electric shocks. Monthly occupational safety training also held for all new employees. Introduction of occupational safety contacts (KoPAS).</p>	Not achieved	No. of occupational accidents (both minor and significant accidents)

Targets	Baseline and target years	2024 results	Status	Metrics
Long-term health: we will stabilise the absence rate by 2025 and lower it long-term	2020; 2025	<p>Absence rate 2021: 3.80 %</p> <p>Absence rate 2022: 4.42 %</p> <p>Absence rate 2023: 4.02 %</p> <p>Absence rate 2024: 4.31 %</p> <p>The lost hours rate for 2024 was 4.31% (in relation to contracted hours) in total, 0.29 percentage points higher than the previous year. Down almost 2.53 percentage points during the reporting year, illness was the most frequent cause of absence at 80.72 %. In particular, long-term absences due to illness have been reduced. Absences due to occupational accidents increased by 0.08 percentage points compared to the previous year. The reasons for this increase are not only the higher number of accidents, but also the improved data quality in recording lost hours. For 2025, the focus is on reducing short-term absences due to illness.</p> <p>Internal health-promotion programmes: Work/life balance; Healthy eating; Balancing work with a new baby; Flexible working; Ergonomic working; Avoiding home and leisure injuries; Getting healthy; Accepting help; Achieving a balanced lifestyle; Nurturing yourself; Maintaining good mental health.</p>	Delayed	Absence rate, in % of contracted hours
Investment in education and training: 0.65 % of payroll spend	Annually	<p>Investment 2021: 0.67 % (CHF 899,000)</p> <p>Investment 2022: 0.67 % (CHF 925,000)</p> <p>Investment 2023: 0.62 % (CHF 857,000)</p> <p>Investment 2024: 0.65 % (CHF 880,000)</p> <p>“V-ZUG Academy” offering: internal and external training courses on a wide variety of subjects</p>	Achieved	Investment as % of AHV insured salary total

Targets, results and status in relation to the focus topic “Healthy and committed employees”  
Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

Targets	Baseline and target years	2024 results	Status	Metrics
Investment in vocational training: 1.35 % of payroll spend	Annually	Investment 2021: 1.46 % (CHF 1,965,000) Investment 2022: 1.37 % (CHF 1,900,000) Investment 2023: 1.39 % (CHF 1,937,000) Investment 2024: 1.36 % (CHF 1,848,000)  Occupations (Zug only): automation engineer, automation technician, IT specialist, media and technology specialist, commercial employee, chef, design engineer, logistics specialist, general mechanic, mechanical technician, road transport specialist Total of 93 apprenticeships in 11 skilled trades	Achieved	Investment as % of AHV insured salary total
Diversity: we will increase the proportion of women across the Group	n.a.; 2025 (new: 2030)			HR metrics
1) In leadership team, incl. Board, to >25 %		1) Leadership team: 2021: 23.6 % / 2022: 20.0 % / 2023: 20.8 % / 2024: 21.5 %	1) Delayed	
2) same proportion in management team as across the entire company (see 3)		2) Management team: 2021: 20.8 % / 2022: 22.4 % / 2023: 20.6 % / 2024: 20.7 %	2) Delayed	
3) and proportion of women generally across the entire company		3) Proportion of women generally: 2021: 23.2 % / 2022: 24.4 % / 2023: 23.6 % / 2024: 24.2 %  Despite our considerable efforts, it is proving a challenge to increase the proportion of women at the company in the short term. Therefore, in 2023, we decided to stick to the ambitious target, but to change the target year from 2025 to 2030.  Encouragingly, for 2024, V-ZUG has a higher proportion of women on all three employee levels.  Measures to support combining work and family: part-time models, annual working time accounts, flexible working models, smart work, working from home, diversity recruitment guidelines, provision of neutral information about occupations on Future Day, "Trau Dich" ("dare to lead") campaign	3) On track	
Inclusion: employees feel included and show commitment, and work satisfaction is high: Target: > 80 %	Survey every 2-3 years	2018 employee survey: 74 points 2021 employee survey: 79 points 2023 employee survey: 79 points 2024 employee survey: no survey conducted, scheduled for 2025  2018 survey within V-ZUG Ltd (approx. 80 % of employees), extended to whole Group in 2021 and 2023 (100 % of employees). The survey is carried out across the Group every two years.	On track	Employee survey: Indicator  "Goal-driven attitude" – 2021 Swiss benchmark: 80 points

# Targets, facts and figures

## Focus topic: Environment and climate protection

Targets	Baseline and target years	2024 results	Status	Metrics
CO <sub>2</sub> emissions				
To be carbon-neutral at all production sites in Scope 1 and 2 (incl. offsetting)	Annual review	The remaining emissions in the 2024 reporting year will once again be offset in collaboration with the Ripa Gar Foundation with high-quality reforestation in the "V-Forest" (removal certificates). For details, see the <a href="#">TCFD Report</a> .	Achieved (since 2020)	Scope 1 and 2 emissions as per Greenhouse Gas Protocol (market-based)
To reduce the remaining Scope 1 and 2 emissions by 80 % (long-term ambition: 100 %)	2020; 2030	2021: 4,340 t CO <sub>2</sub> 2022: 3,689 t CO <sub>2</sub> 2023: 3,741 t CO <sub>2</sub> 2024: 3,541 t CO <sub>2</sub>  Thanks to ongoing transformation at the Zug site and the gradual decarbonisation in the vehicle fleet, emissions fell by 10.5 % in the reporting year. Cumulatively compared to the 2020 baseline year, V-ZUG is on track (-24.7 %).  Market-based figures; for details, see <a href="#">GRI index</a>  With the heat pump in the new refrigerator factory building in Sulgen, V-ZUG has completely eliminated emissions caused by heating oil at the old site (Arbon). The expansion of the Multi Energy Hub (MEH) at the Zug site is progressing. During the reporting year, however, various areas were still running in duplicate (transformation). In addition, the existing buildings will no longer be connected to the MEH, as they will be replaced with new buildings by 2030 (including MEH connection). The gradual decarbonisation of the V-ZUG vehicle fleet (trucks and service vehicles) contributes positively to the reduction, as well as the reduction of propane gas, which was completely discontinued in September.	On track	Scope 1 and 2 emissions as per Greenhouse Gas Protocol

Targets	Baseline and target years	2024 results	Status	Metrics
To have transparency regarding our Scope 3 emissions	n.a.; 2021	Has been recorded annually since 2021: 11 out of 15 categories are relevant for V-ZUG; two categories together account for around 90 % of emissions: 3.11: Use of sold products/3.1: Purchased Goods and Services – for details, see <a href="#">GRI index</a> . Target finally achieved: Scope 3 recording is included as standard in reporting	Achieved (since 2021)	Scope 3 emissions as per Greenhouse Gas Protocol
To reduce Scope 3 emissions by 30 %	2020; 2030	<p>The focus is on the two categories that together account for approx. 90 % of emissions: 3.11: Use of Sold Products/3.1: Purchased Goods and Services</p> <p>Scope 3 emissions  2021: 432,057 (–6.1 % compared to the previous year, –6.1 % compared to the baseline)  2022: 417,617 (–3.3 % compared to the previous year, –9.21 % compared to the baseline)  2023: 338,078 (–19 % compared to the previous year, –26.5 % compared to the baseline)  2024: 339,979 (+0.6 % relative to the previous year, –26.1 % compared to the baseline)</p> <p>Scope 3 at V-ZUG depends heavily on volume (70 % of emissions come from use, approx. 20 % via the materials used). During the reporting year, 4 % more appliances were sold, but emissions were kept at the level of the previous year. This was achieved through advances in fleet efficiency with respect to power consumption (–5.8 %), the footprint of the materials used and more renewable electricity in the markets where our appliances are used. In relative terms (emissions per appliance sold), the reduction compared to the baseline also amounts to –16.2 %.</p>	On track	Scope 3 emissions as per Greenhouse Gas Protocol, annual survey of main categories (11 out of 15)

Targets	Baseline and target years	2024 results	Status	Metrics																								
Environment and waste																												
To continuously reduce the amount of waste through targeted initiatives and by optimising disposal methods. For years, we have not disposed of any waste in landfill sites, and we are maintaining this approach.	2020; 2030	<div>Survey of waste and disposal methods: 2024: Recycling 88.1/composting 0.2 %/incineration: 10.5%/special waste: 1.3 %/ landfill: 0 % (see GRI index for details)</div> <div>Focus in 2024: A new waste concept was introduced at Zug as part of the site development process. In this way, V-ZUG is responsible for operational waste management in accordance with the recycling and fuel strategy in the spirit of the circular economy.</div>	On track	Waste amount in tonnes and by waste type																								
<div>To reduce the relative impact on the environment continuously and increase ecological efficiency by at least 40 % by 2030</div> <div>(ecological efficiency: environmental impact, relative to net sales)</div>	2020; 2030	<div>The planned environmental measures have been implemented. The environmental footprint of the production sites has not changed significantly, as larger volumes were produced again compared to the previous year. Changzhou, in particular, was able to bring its production back to normal levels. Sales increased by 1.1 % in a difficult market environment. This did not result in an increase in ecological efficiency in 2024. Cumulatively, however, V-ZUG is on track.</div> <table><tr><td>2021: environmental footprint:</td><td>19,639 million EPs</td></tr><tr><td>Net sales:</td><td>CHF 631.3 million</td></tr><tr><td>Increase in ecological efficiency:</td><td>6.9 %</td></tr><tr><td>2022: environmental footprint:</td><td>16,902 million EPs</td></tr><tr><td>Net sales:</td><td>CHF 636.3 million</td></tr><tr><td>Increase in ecological efficiency:</td><td>13.6 %</td></tr><tr><td>2023: environmental footprint:</td><td>15,134 million EPs</td></tr><tr><td>Net sales:</td><td>CHF 585.4 million</td></tr><tr><td>Increase in ecological efficiency:</td><td>2.1 %</td></tr><tr><td>2024: environmental footprint:</td><td>15,218 million EPs</td></tr><tr><td>Net sales:</td><td>CHF 591.7 million</td></tr><tr><td>Increase in ecological efficiency:</td><td>0.4 %</td></tr></table> <div>Cumulative since 2020: increase in ecological efficiency of 23 %</div>	2021: environmental footprint:	19,639 million EPs	Net sales:	CHF 631.3 million	Increase in ecological efficiency:	6.9 %	2022: environmental footprint:	16,902 million EPs	Net sales:	CHF 636.3 million	Increase in ecological efficiency:	13.6 %	2023: environmental footprint:	15,134 million EPs	Net sales:	CHF 585.4 million	Increase in ecological efficiency:	2.1 %	2024: environmental footprint:	15,218 million EPs	Net sales:	CHF 591.7 million	Increase in ecological efficiency:	0.4 %	On track	EPs (in accordance with the Swiss ecological scarcity method of life cycle assessment, version 2021), indexed net sales adjusted for currency effects, environmental impact relative to net sales
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Targets, results and status in relation to the focus topic "Environment and climate protection"  
Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

# Targets, facts and figures

## Focus topic: Entrepreneurship for sustainable prosperity

Targets	Baseline and target years	2024 results	Status	Metrics
To generate a significant two-digit EBIT margin in the medium term (10–13%), in order to be able to invest sustainably and thereby maintain our future viability	Annually	EBIT margin 2021: 9.9% EBIT margin 2022: 1.6% EBIT margin 2023: 2.9% EBIT margin 2024: 4.3%  See Financial Report for background and details	Not achieved	EBIT margin as per Annual Report
To achieve organic sales growth of 3%	Annually	Sales growth 2021: 9.5% Sales growth 2022: 0.8% Sales growth 2023: –8.0% Sales growth 2024: 1.1%  See Financial Report for background and details	Not achieved	Sales growth as a percentage as per Annual Report
To have audited all our key suppliers (covering at least 80 % of our sales volume) in line with sustainability criteria	n.a.; 2025	Tools and processes introduced and being established ("IntegrityNext", "Sphera", Supplier Code of Conduct, training, etc.).  Using the IntegrityNext self-declaration platform, we covered 75 % of our purchasing volume by the end 2024. Regular supplier audits also conducted on site, including sustainability aspects. Audits were stepped up again following a pandemic-related reduction.	On track	Purchasing volumes and number of suppliers
To account for one core element per product category, with a transparent supply chain down to the lowest possible level	n.a.; 2025	Initial core elements considered in detail with the Procurement department: <ul style="list-style-type: none"> <li>• Washing machine plinth (plastic)</li> <li>• Washing machine drawer (plastic)</li> <li>• Interior of dishwasher and "CombiSteamer" (stainless steel)</li> </ul> During the reporting year, the focus was on the transparency of the origin countries of materials across all goods purchased, not on the transparency of the supply chain of individual core elements. In the case of technical components (plastics, electronics, metals, motors, etc.), it is quite difficult to trace the supply chain over more than three stages. V-ZUG plans to revise this goal for 2025.	On track	Core element per product category