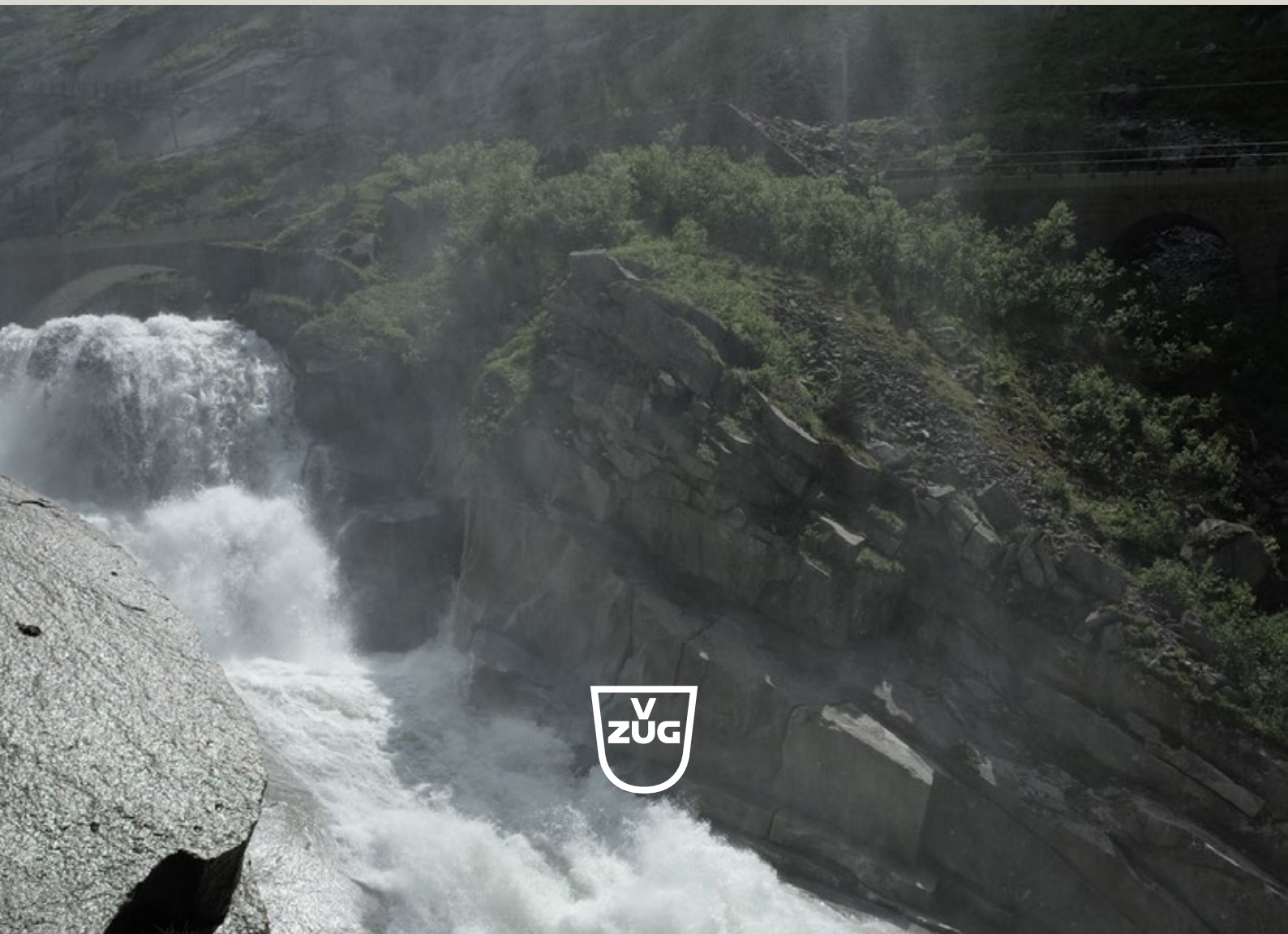


Extract from the V-ZUG Group Annual Report 2023

Report on non-financial matters



Contents of the report on non-financial matters

Interview with Peter Spirig, V-ZUG CEO	24
Strategy and sustainability	27
Products and services for a future-fit society	33
Targets, facts and figures	36
Practical example: The factory of the future	38
Healthy and committed employees	41
Targets, facts and figures	44
Practical example: Smart work – more productivity, less stress on the environment	46
Environment and climate protection	49
Targets, facts and figures	52
Practical example: The cycle of energy	54
Entrepreneurship for sustainable prosperity	57
Targets, facts and figures	59
Practical example: Low-carbon-emissions steel in our supply chain	60
Appendix: Non-financial reporting	134

Interview with Peter Spirig, V-ZUG CEO

The market landscape in 2023 presented a stark contrast to the pandemic-induced boom of 2021 and the unusually high demand experienced in 2022. What were the implications of this for V-ZUG?

The year 2022 was marked by strong demand but also plagued by significant supply bottlenecks. In comparison, the market situation we faced in 2023 was rather difficult. The combination of geopolitical uncertainties, rising interest rates and the unexpected resurgence of inflation led to people spending less – and a decline in demand for our products. Although we achieved cost savings and implemented higher sales prices, we are still looking back on a year that presented financial challenges.

How does V-ZUG manage such market fluctuations?

It is imperative for us to learn that the concept of a “normal” situation is no longer applicable, as market dynamics and geopolitical conditions can rapidly evolve. It is crucial that we are agile, can respond quickly and remain focused on our vision.

What does that mean?

We want to ensure that V-ZUG is fit for the future. To accomplish this, we rely on dedicated and highly qualified staff, modern work practices, resilient supply chains and strong partnerships. This is the only way we can be innovative enough to rethink business models and pursue visionary goals that transcend multiple industries in order to create a future-fit society. Sustainability plays a key role in this context. We firmly believe that this is the key to achieving long-term success.

What does “sustainable” mean at V-ZUG?

We have a holistic understanding of sustainability, with due consideration of its economic, ecological and social aspects. We see it as a transformation process that extends throughout our entire value chain and beyond. The fact alone that well over 90 % of emissions from our business activities stem from indirect sources in the upstream and downstream value chain clearly shows that we must develop our commitment to building a future-fit society throughout every aspect of our operations.

In 2023, we solidified our commitment to sustainability by incorporating it into our Articles of Association and expanding our formal corporate purpose to encompass this essential element. In our most critical sustainability areas, we are working towards strategic goals that we aim to accomplish by 2030. For example, we are developing all of our appliances according to circular principles and will have audited all of our key suppliers according to sustainability criteria starting in 2025.

We are focusing our efforts on areas where we can have the greatest impact: developing circular products and sustainable business models, improving eco-efficiency and reducing emissions, building resilient and sustainable supply chains, fostering partnerships for sustainability and innovation and – most importantly – prioritising the well-being and development of our employees. Healthy and committed employees are the lifeblood of our company.

Which topics did V-ZUG drive forward in 2023?

In view of the volatile geopolitical landscape, we placed a strong focus on modern working methods and workplaces. We implemented the Scaled Agile Framework, a framework that helps us to develop the necessary agility across our entire organisation and fosters effective collaboration among teams. In 2024, we will be able to put our new “Zephyr Ost” production and assembly building into operation and gradually transfer our production lines to this facility. In 2023, we continued to drive the circular economy forward by engaging in collaborative projects, such as with the Finnish company Outokumpu, where we actively facilitated the use of green steel. This is also reflected in the development of a prototype circular economy factory and the more than 30 product life cycle assessments in which we transparently show which measures we can use to reduce the environmental footprint of appliances. In addition, it was crucial for us to actively pursue commitments such as the mission of the Association for the Decarbonization of Industry. We see great potential in utilising hydrogen as a clean energy source to power industrial processes. We are also implementing a whole host of other activities – from introducing smart work principles for our employees to promoting a sense of self-efficacy among our customers with respect to adopting a more sustainable lifestyle through our V-Kitchen app and the internationalised CO₂ web shop.



Peter Spirig, CEO, V-ZUG Ltd

That sounds like a lot of investment at a time when many companies are reluctant to provide capital for such purposes.

That is indeed a correct assessment. The CO₂ fund is now paying off. Since 2018, we have been contributing to a fund through a self-imposed incentive tax of CHF 120 per tonne of CO₂ emitted. This fund in turn allows us to implement pioneering sustainability projects – over and above compensation through the V-Forest – even if these projects may still be economically difficult. In 2023, for example, we funded the acquisition of our new e-truck and the pilot circular economy factory mentioned earlier. It is also important to understand that we are talking about investments here. In other words, we are convinced that these will prepare us for the future and have a positive impact on our business success.

The impact of our commitment to sustainability is already evident in how our image is perceived. The [2023 SCOPES Report](#), published by Publicis Group Switzerland together with Grownate and the University of St. Gallen on the perceived sustainability of companies in Switzerland, reveals that the 5,555 consumers surveyed see V-ZUG as one of the five most sustainable companies. This reaffirms our commitment and serves as a great source of motivation for us.

Visionary projects are inspiring; regulatory requirements generally less so. What impact will the new Swiss climate reporting requirements and the Supply Chain Act have on V-ZUG?

These requirements help create a strong foundation for addressing essential sustainability concerns within the Swiss economy. This has the positive effect that non-financial indicators are now on par with financial reporting. It was therefore only logical for us to merge the Annual and Sustainability Reports. We will be publishing a combined Annual Report for the first time this year, which will be presented to our shareholders for approval at the Annual General Meeting.

With a decade of experience in sustainability reporting, we have used this strong foundation to selectively delve deeper into a few specific topics in our current reporting. For example, we engaged in an intensive internal discussion of the risks and opportunities of climate-related impacts and prepared a TCFD report ([TCFD: Task Force on Climate-related Financial Disclosures](#)). We conducted an analysis to determine if we are obligated to provide reporting in compliance with the Ordinance on Due Diligence

Attaching equal value to environment, society and enterprise



Obligations and Transparency Regarding Minerals and Metals from Conflict Areas and Child Labour of 3 December 2021. Against this backdrop, we engaged in initiatives such as the adoption of the long-planned Code of Conduct for Suppliers and the optimisation of our due diligence processes.

Internally, this intense discussion further heightened the awareness of our employees and managers of the importance of the issues. With a view to Switzerland, the new regulatory requirements inevitably trigger processes and discussions across all sectors that would not take place otherwise.

And what will happen in 2024?

Despite our anticipation of market volatility, we are confident in our level of preparedness. Our efforts to date in the area of sustainability are becoming more and more evident. I anticipate that there will be growing demand for circular business models such as our “Product as a Service” approach, through which we rent washing machines and dryers instead of selling them. In the coming year, we plan to broaden our model range by rolling out one or two new types of kitchen appliances. We are therefore continuing to work step by step on the transformation from a recycling economy to a circular economy.

The site transformation and the gradual commissioning of the Multi Energy Hub will bring us a major step closer to achieving our goal of significantly reducing emissions. Partnerships that span different industries and sectors and are dedicated to creating a future-fit society will play a crucial role in the years ahead. This is the only way we can master the complex global challenges and scale up innovations.

Strategy and sustainability

Sustainability is a key aspect of our brand promise. We sell resource-efficient products and prioritise transparency and sustainability in our procurement practices. We invest in the development and health of our employees, as well as in cutting-edge production facilities and in sustainable energy systems at our site in Zug. We also place a strong emphasis on implementing circular business models.

With around 5.5 million household appliances in use, we bear great responsibility for the environmental and social footprints of our products along the entire value chain. As we want to help create a society fit for the future, we are aiming to make a positive contribution within the environmental, social and governance spheres.

Sustainability is strategically embedded

Sustainability is an integral part of our corporate strategy. It has also been enshrined in the Articles of Association of V-ZUG Holding since 2023. We make targeted investments in innovative solutions that will bolster our competitiveness in the future. One example of this is our new “Zephyr Ost” production and assembly plant, which was built as part of the transformation of the Zug production site. It sets new standards for sustainable construction and will be successively put into operation in 2024.

In the reporting year, we remained dedicated to our strategic goal of advancing circular products and business models. We firmly believe that our efforts are contributing to the advancement of climate-friendly, entrepreneurially engaging and socially relevant development. Since May 2023, the “Intrapreneur Circular Economy” initiative has fostered and advanced the circular economy within the enterprise.

We believe in the importance of sharing our knowledge and learning from others in order to cultivate progress within society as a whole. To this end, we seek dialogue with stakeholders, such as our peers or interest groups, and participate in associations and educational initiatives (“Entrepreneurship for sustainable prosperity”, p. 57).

The reporting year was defined by the implementation of the regulatory ordinances on climate reporting and supply chain transparency in Switzerland. In our view, this is a significant milestone in working towards a sustainable future: the non-financial metrics are now given the same importance as the key financial figures, and the three pillars of sustainability – “people”, “planet” and “profit” – are increasingly recognised as being equally important.

Strategy overview: Sustainability is a foundation stone of our corporate strategy

Foundation stones provide the direction and our business initiatives strands come together to form the strong rope of strategic ambitions.



Decentralised and effective: the V-ZUG Sustainability Workforce

Our Head of Sustainability leads an interdisciplinary working group known as the V-ZUG Sustainability Workforce and reports directly to the CEO. Sustainability is deliberately organised on a decentralised basis. The experience of the past three years has indeed confirmed our expectation that the decentralised approach would enable our commitment to sustainability to develop greater internal dynamic momentum and spread throughout the company more effectively than if sustainable responsibility had been organised by a central staff unit. This dedicated team comprising representatives from different departments drives the strategic and organisational processes and identifies potential forward-looking projects.

Transparency and comparability

When we are developing new appliances, we want to know in advance what we can do to minimise their environmental impacts. Over the past two years, we have therefore made significant investments in enhancing the life cycle assessments of our appliances and operations. In doing so, we carry out our accounting based on CO₂ emissions, ecopoints (EP) and monetary equivalents. We derive the greatest benefit from accounting in accordance with EP, as this allows us to map the ecological impact most comprehensively. By drawing up various life cycle assessments for each product category, we not only achieved but also surpassed one of our targets in 2023. Our goal is now to reduce the EP of appliances in new developments by 5% by 2030. In 2023, we derived the eco-efficiency of our production sites based on their life cycle assessments. We want to increase eco-efficiency by 40% by 2030 ("Environment and climate protection", p. 49).

The transparency provided by life cycle assessments creates scope for innovation and progress. It allows for comparison of the ecological impacts of potential development initiatives based on factual information. We are also keen to share our environmental data with our customers and partners, as they are increasingly seeking such information. By practising open and transparent handling of our data, we are actively contributing to the acceleration of progress.

Reducing CO₂ emissions

Meeting the challenge of climate protection is contingent upon the collaborative efforts of the realms of business, policymaking and science. We want to play our part in this by working alongside others on targeted innovation projects that foster a climate-friendly future. Our internal CO₂ fund, which is financed by voluntary incentive taxes for our CO₂ emissions, plays a crucial role here. In 2023, we again used these funds to support the non-profit Association for the Decarbonization of Industry and the growth of the "V-Forest", while also initiating new collaborative projects such as "Circular Green Steel" ("Low-carbon-emissions steel in our own supply chain", p. 60) and the circular economy factory. We also financed a new electric truck.

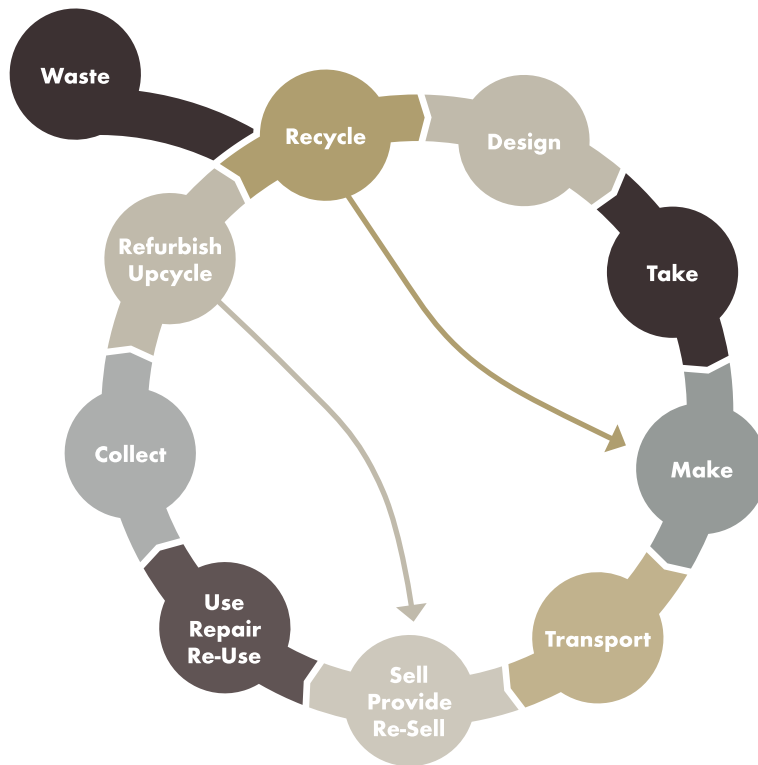
A more environmentally friendly energy supply is paramount if we are to reduce our emissions. Since early 2023, the Multi Energy Hub has been supplying our Zug site and the surrounding neighbourhood with renewable energy. In particular, we are reducing our consumption of natural gas and thus our CO₂ emissions ("Environment and climate protection", p. 49). To ensure our manufacturing operations are already climate-neutral, since 2020 we have been offsetting our remaining emissions via the "V-Forest" reforestation project in Scotland.

As the majority of carbon emissions are produced when our appliances are used in the home, we want to help our customers use their V-ZUG appliances in an environmentally friendly manner. We therefore offer energy-saving tips via our V-ZUG Home app. Our CO₂ web shop, which was launched in 2022, has now been internationalised. This provides all our customers with the opportunity to offset the remaining emissions produced by their appliances through the "V-Forest" programme ("Environment and climate protection", p. 49).

New regulatory requirements for reporting

In light of the entry into force of the indirect counterproposal to Switzerland's Popular Initiative for Responsible Businesses, new legal obligations for corporate due diligence and non-financial reporting, including climate reporting, will apply in Switzerland starting from the 2023 financial year for companies above a certain size – including V-ZUG.

To fully comply with these requirements, we are supplementing the Sustainability Report with a report aligned with the framework of the Task Force on Climate-related Financial Disclosures (TCFD, p. 164) and a statement on the due diligence obligations in the supply chain (DDTrO p. 178).

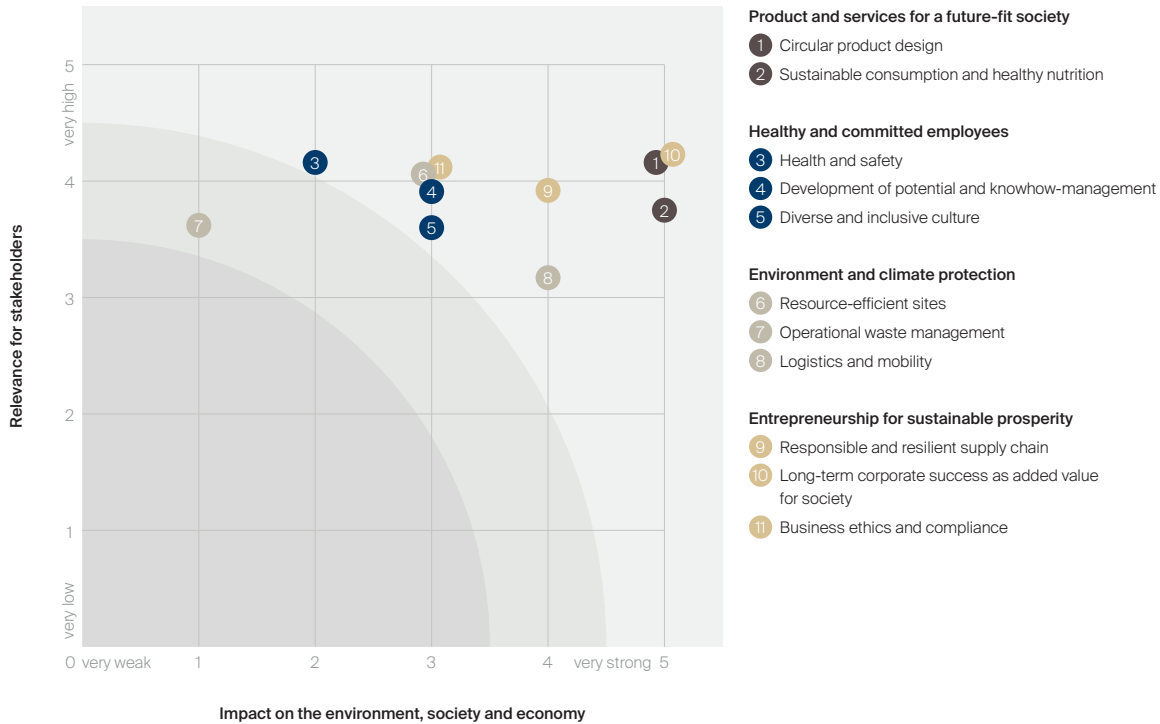


Material topics and focus topics for 2030

Following on from our stock market flotation, in 2021 we reviewed and honed our material sustainability topics together with internal and external stakeholders. We then combined a total of eleven topics into four priority areas and consolidated them to form guiding focus topics. These also provide the framework for our reporting:

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

To achieve broad-based support for our materiality process, we consulted 68 central stakeholders in an online survey. These included the Board of Directors, Executive Committee, employees, customers, partners, suppliers, banks, investors as well as individuals from politics and science. Their evaluation of the relevance of the individual sustainability topics for V-ZUG are indicated on the Y axis in the figure below. The X axis indicates what effect V-ZUG has on the environment, society and economy, thus providing an impact-related perspective on sustainability topics. The materiality of our actual and potential impacts was rated by an internal and external working group,



with a distinction being drawn between direct and indirect impacts. The results were subsequently discussed and finalised with selected members of the Executive Committee and the Board of Directors (“Material topics: Framing and impact”, p. 137). The matrix clearly indicates that the vision of “Products and services for a future-fit society” is very much in focus. Along with “Circular product design”, this theme includes the topic of “Sustainable consumption and healthy nutrition”.

We want to offer consumers appliances that are even more energy-efficient and recyclable and make it easy and fun for them to use these in a more environmentally friendly way. We would also like to see our products and services motivating users to adopt healthier, more sustainable consumption and eating habits. This is only possible, however, if we use our strength as a financially sound company to drive innovation and make forward-looking investments. We therefore explicitly see our long-term commercial success as something that both creates social added value and protects the environment, consequently benefiting both society and the economy.

The respective chapters provide an overview of our strategic goals and the outcomes achieved in 2023. The goals with measurable targets and key metrics are presented in detail in the appendix (“Targets and status”, p. 180). Setting targets remains an important yet difficult process. We have already defined specific targets and metrics in many areas, but not yet in all. Our internal reflections on what would be desirable and what is realistic have already helped us move a long way forward. They also exemplify our approach of not setting arbitrary targets but instead setting the right ones – and then pursuing them rigorously. Our targets are officially approved by the Board of Directors and the Executive Committee.

Our contribution to the UN's Sustainable Development Goals

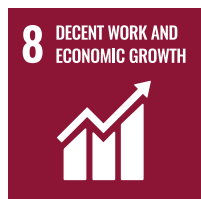
In our commitment to sustainability, we have align ourselves with the United Nations' (UN) 2030 Agenda for Sustainable Development and have therefore been a member of the Swiss Triple Impact (STI) initiative since 2020. STI is dedicated to promoting the attainment of the UN's 17 Sustainable Development 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, we grappled with the question of which of the 17 SDGs V-ZUG has the most impact on. There is no doubt that in order to successfully implement Agenda 2030, we have to be committed to all the SDGs. But by consolidating our efforts and concentrating on those areas in which we as a company have the biggest influence, we can have the greatest impact.

SDG

Contribution of V-ZUG to the SDGs



- Products are resource- and energy-efficient in use
- 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")
- Energy efficiency in our processes and in facilities management, e.g. by using energy from waste heat



- Investment in development and training, and also the employability of our staff across all generations
- Investing in the vocational education and training of young people
- Varied, interesting careers and employee advancement
- A high degree of job security and a positive influence on employee health
- Promoting equal opportunities and diversity
- Contributing to the attractiveness of the sites in Zug and Sulgen, and creating attractive and varied jobs for the local workforce
- Setting high labour standards in the supply chain
- Focusing on healthy economic growth, taking into account people and the environment



- Developing circular products
- Internal and external innovative strength
- Modern, resource-saving industry and infrastructure, particularly in developing the Zug site and the new building in Sulgen
- Using high environmental construction standards and innovative, sustainable construction methods at the Zug development site



- High-quality, durable and serviceable products with spare parts available for a period of up to 15 years
- Transparent product information for informed purchasing decisions
- Raising the awareness of end customers for the optimum resource- and energy-efficient use of appliances
- Supporting healthy, balanced nutrition and avoiding food waste
- Energy-efficient, resource-efficient production
- The use of circular materials



- Preventing, reducing and – where necessary – offsetting emissions that are harmful to the climate and the environment
- Carbon-neutral production of Swiss-made appliances by offsetting through the V-Forest reforestation project
- Internal carbon offset levy of CHF 120 per tonne of CO₂
- Establishing environmental standards within the supply chain
- Raising employee awareness, e.g. through the new mobility strategy

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



Products and services for a future-fit society

The V-ZUG brand stands for high-quality household appliances that are efficient and durable. With a great drive to innovate, we make our products and services fit for a sustainable future. To make optimal use of existing resources, we are gradually improving the circularity of our products and offering new business models. By providing ecological product features and numerous tips, we are helping our customers to use V-ZUG appliances in the most environmentally friendly manner.

A question of mindset and design

The circular economy begins in our heads. It inspires us to think critically about traditional production processes and consider them from a different angle. It implies a transformation in the mindset of the entire company and demands new avenues of cooperation between all players. While this is often difficult, we view this paradigm shift as an opportunity, and as an innovative, forward-looking company, we intend to use it. To that end, the Sustainability Working Group in the Development department works closely with other departments in putting circular economy principles into practice. At training seminars as well as in daily exchanges with developers, product managers and our Procurement department, the Sustainability Working Group highlights the advantages of products that are designed to be circular and points out the commercial opportunities associated with them.

The way a product is designed is crucial to its circularity. For that reason, we plan to develop all new appliances in accordance with our ten design-to-circularity principles by 2030. We pay particular attention to ensuring that an appliance is modular and can be easily disassembled. Simple dismantling will in future enable us to extract components and parts from decommissioned appliances by type and use them for new purposes. That way, the materials will remain in circulation, and we will require fewer primary resources. This is preferable to recycling, which creates mixed fractions. This principle is already resulting in the greater use of screws as opposed to glue in assembly: while gluing simplifies assembly, it makes the components less recyclable and harder to dismantle. Modularity, on the other hand, allows us to gradually retrofit appliances. In line with lean management principles, we also encourage the use of as many standardised parts as possible in a product group, and we are minimising the number of different materials. This reduces process complexity, cuts production waste and increases reusability. A high recycling and reuse rate is an initial product requirement. We are aiming for a reuse rate of at least 90 % by 2025 for new product releases.

How our company is evolving to meet the requirements of a circular economy, as well as how production processes will at some point change, is being tested in our "circular economy factory" pilot project ("The factory of the future", p. 38).

A focus on materials together with partners

In accordance with our circularity principles, we seek to minimise the amount of raw materials we use. Reducing weight means cost savings and also has a positive effect on environmental impact. Wherever possible, we also consider using materials with a high recycling rate. We give preference to materials that are easy to recycle and have a lower impact on the environment, in terms of both manufacturing and disposal. This strategic choice to use materials that make our products more circular and climate friendly requires us to work more directly with our suppliers, which is resulting in new collaborations ("Low-carbon-emissions steel in our supply chain", p. 60). As part of our active collaboration with the University of Lucerne, a group of students worked with us on a project in 2023 to identify which supplier relationships harboured the greatest potential for meaningful reusability of component parts. The results show that this is especially attractive for suppliers of mono-materials. With new development projects, we are strengthening our engagement with all players in the value chain, including with the involvement of our Procurement department, and we pay attention to the willingness of suppliers to take back materials. We do this because we know that our ability to offer appliances that are more sustainable depends upon strong partnerships. For this reason, we also carried out numerous projects with external recycling partners in the reporting year. One of them was in cooperation with the plastics manufacturer Georg UTZ AG. Together, we are conducting a pilot project on the manufacture of plinths for washing machines, tumble dryers and dishwashers using recycled materials.

Taking responsibility opens new paths

We take responsibility for our appliances over their entire life cycle. But what does that mean specifically? Firstly, we manufacture products that are as efficient and durable as possible and easy to repair. If the aim is to preserve existing resources and reduce the impact on the environment, then repairing a product should normally be prioritised over buying a new one. Robust durability and a timeless design are also an important basis for sustainable business models, including with used appliances. With our Second Life model, we are extending the lifespan of our household appliances that are prematurely withdrawn from service, such as demonstration models or appliances returned by customers. Instead of being prematurely passed on for recycling, they are given a new life through refurbishment and can be purchased in the online shop of the SIBIR Group. We ran this business model on a pilot basis in 2023, and we plan to expand it in the coming years. In addition, we have long taken responsibility for providing services in the event of a fault or damage. With V-ZUG's "Product as a Service" (PaaS) business model, we offer a real alternative to outright purchase. We retain ownership of the household appliances, and customers sign a PaaS contract giving them use of the appliance plus servicing and support solutions at fixed rates. When the contract comes to an end, we take the appliances back. That way, we control the flow of materials and ensure that the appliances and their component parts remain within the closed materials cycle for as long as possible.

Product life cycle assessments create transparency

Moreover, we take responsibility for the environmental impact of our products. We therefore want to know precisely how an appliance affects the environment over its entire life cycle. As in the previous year, we also invested significant resources in the reporting year in further product life cycle assessments, and we enhanced our expertise with "Sustainability Expert Engineering". We had set an objective of creating an LCA for each reference appliance in all eleven product categories by 2023, and we vastly exceeded that goal: as of the end of the reporting year, we had prepared a total of 32 product life cycle assessments. To obtain LCAs that are as accurate as possible, we made tailored modifications to the processes and material databases that are examined by our analysis tool SimaPro. All product life cycle assessments and the methodology utilised were reviewed by experts from Carbotech.

We evaluate LCAs using three methods: according to ecopoints (EP), CO₂-equivalent and monetary value. These indicators provide a solid basis that enables us to utilise materials and processes in the development phase which have the lowest possible environmental impact. LCAs conducted according to ecological scarcity (MöK2021), measured in EP, carry the most weight in our decision-making processes, as they take into account a broad spectrum of 18 impact categories. These include the greenhouse gas effect, soil and water acidification, noise, and toxicity for humans and the ecosystem. The aim is to cut EP by at least 5% on all new products developed as compared with their predecessor models. The product life cycle assessments show us where we can start. In this regard, we always need to find an optimal balance between environmental impact and production costs.

The product life cycle assessments conducted in 2023 provided us with fascinating insights. On the one hand, with a share of 30 to 50%, depending on the product category, manufacturing has a greater environmental impact than we assumed. On the other hand, electricity consumption during use has a strong effect on EP. Our contribution in this regard is offering household appliances that are highly energy efficient. This once again shows that the way in which appliances are used by the customer is decisive for the associated environmental impact.

Prioritising environmentally friendly use

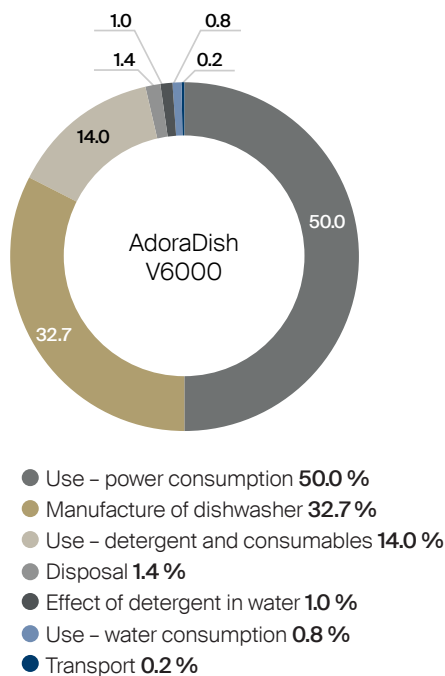
In this spirit, we believe that part of our broad responsibility includes helping our customers use their appliances in an environmentally friendly manner. Eco functions reduce the ecological footprint compared to a conventional programme. Although eco programmes take longer, the long soaking time means they require less heat and therefore less energy to achieve equally good results. Integrated EcoManagement functions predict the energy and water consumption of appliances. To keep our customers even better informed, we make targeted use of the opportunities afforded by digitalisation and the networking of appliances. We offer many energy-saving tips via the V-ZUG Home app. Moreover, we further augmented the EcoManagement functions in the reporting year. Our app now informs customers via push notifications about the precise amount of energy consumed by the selected programme. This allows customers to compare transparently how differences in appliance use affect resource consumption. Clear information provides the basis for more environmentally friendly decisions.

Tried-and-tested products, efficient innovations

In 2023, our “Adora” washing machine celebrated its 65th anniversary. The “Adora” has long stood for reliable durability, efficiency and quality. In the reporting year, we upgraded the “Adora” with technical modifications, and all models now have an energy efficiency rating of A. We also launched a new flagship product, the “CombiSteamer V6000 Grand”, thus expanding our expertise in the steamer category. Steaming is considered to be one of the gentlest ways of cooking, and with its numerous functions, the “CombiSteamer V6000 Grand” makes it easy for our customers to prepare healthy meals and quickly reheat leftovers without sacrificing flavour.

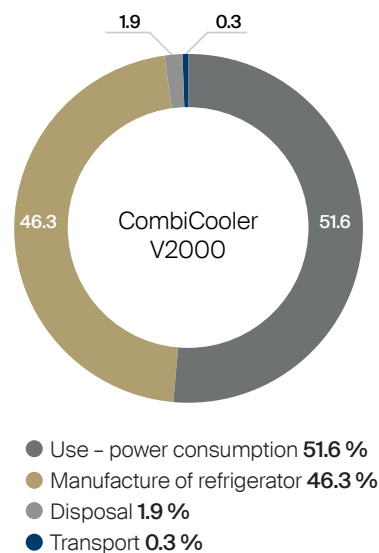
In addition, we worked on a new refrigerator platform in 2023. The redevelopment was mainly driven by considerations obtained from the product life cycle assessments and observations across the entire lifetime. These show an EP increase of 39 % in the assembled condition, primarily due to new insulation materials. However, we have reduced the total EP figure by about 20 % over the entire lifetime of the appliance, since this specific insulation material massively increases the refrigerator’s energy efficiency. It can therefore be beneficial to invest more in the materials used – known as “grey energy” – if this improves the total LCA over the operating life. We are currently discussing with our partners how we can further increase the circularity of refrigerators. It is already clear today that we will lower the EP for the new refrigerator platform by 5 % and achieve a reuse rate of 90 %.

Product life cycle assessment in %



Product life cycle assessment (cradle to grave), “AdoraDish V6000” in ecopoints (EPs): Total 2.60 million EPs / comparison in CO₂ emissions: Total 0.83 t CO₂ (distribution of CO₂ and EPs varies)

Product life cycle assessment in %



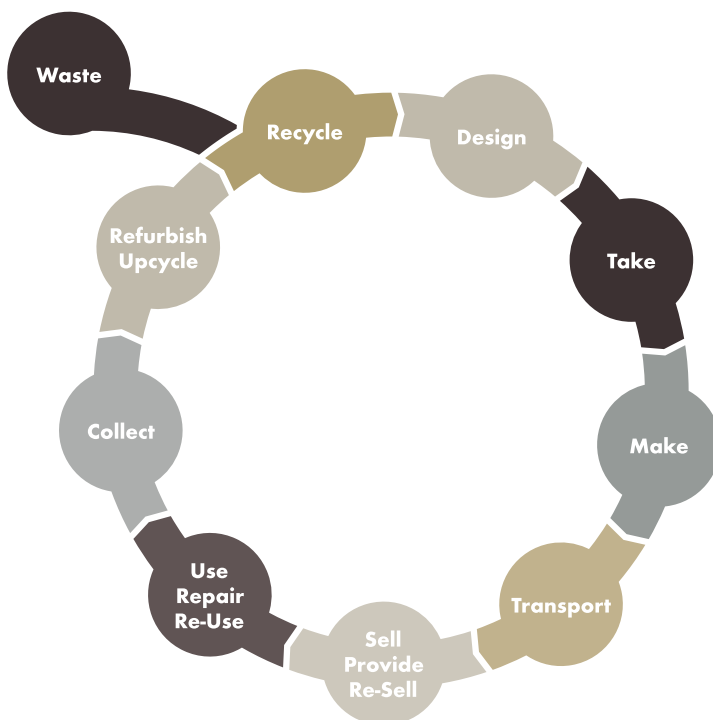
Product life cycle assessment (cradle to grave), “CombiCooler V2000” in ecopoints (EPs): Total 1.71 million EPs / comparison in CO₂ emissions: Total 0.64 t CO₂ (distribution of CO₂ and EPs varies)

Targets, facts and figures

Targets	Baseline and target years	Status
Efficiency		
One appliance per product category in the top 3 for efficiency (comparison site TopTen)	Annual review	Not achieved
Increase fleet efficiency of all appliances (energy and water) by 5%	2021; 2030	On track
All our current network-enabled appliances have extensive integrated eco-functions/ services	n.a.; 2025	On track
Circularity		
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)

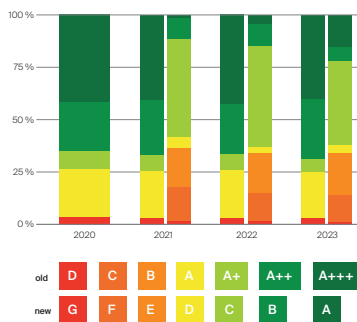
"Design to Circularity" guidelines – promoting the circular economy in product design



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

Appliances supplied with label, by energy class

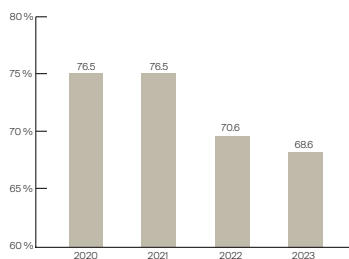


V-ZUG appliances still in efficiency class A

In 2023, around 97% of all V-ZUG appliances shipped continued to have an energy efficiency rating of A or higher (adjusted to standard label to enable comparison¹). 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 2023 reporting year, the percentage of sold appliances rated in the top three efficiency classes (A to C) remained steady at a pleasing 63% (rescaled products).

¹ 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 22% of all V-ZUG appliances shipped.

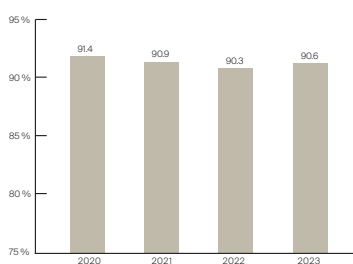
Fault rate¹
(indexed to 2015 baseline)



We are addressing the causes of faults

Thanks to sustained quality initiatives, we are continuing to implement many improvements across the company and consequently have reduced the fault rate by 2 percentage points to 68.6% (indexed to 2015 baseline). All problems are tracked and analysed by Product Quality Monitoring and then processed in a targeted manner.

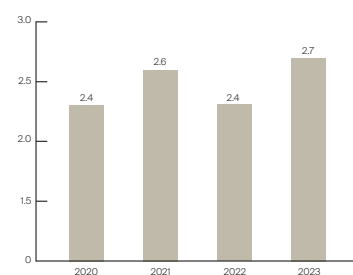
First-time fix rate¹



First-time fix rate remains very high

The first-time fix rate for service visits in 2023 remained very high at 90.6% (2022: 90.3%). Supply chain problems eased in 2023, which caused the first-time fix rate to develop positively.

Average response time in days¹



Despite longer response times, customer satisfaction is gratifying

The average response time increased somewhat (from 2.4 to 2.7 days) compared to the previous year, while customer satisfaction remained high.

Customers rewarded us with a record Net Promoter Score (NPS) of +76. We are very pleased that the V-ZUG brand was once again viewed very positively and perceived to be very sustainable.

¹ Values for Switzerland between 2020 and 2022, and globally for 2023.

The factory of the future

The transformation toward a circular economy entails enormous changes. What does that mean for our company specifically?

Our “circular economy factory” pilot project shows how V-ZUG will in future not just manufacture new household appliances, but also take back previously delivered appliances and repair them or completely dismantle and restore them. A triage takes place in the circular economy factory, which determines how the returning resources will be handled. “Many people are unaware that the recycling economy we have today mostly results in down-cycling, that is, a devaluation of the materials”, says Daniel Frost, Intrapreneur Circular Economy. By contrast, the circular economy factory aims to keep high-quality resources in circulation as long as possible by repairing or dismantling them. In this new ecosystem, materials flow in a closed loop. “Production processes will take place in an integrated, collaborative manner”, explains Marc Vetterli, Sustainability Expert Engineering at V-ZUG. Vetterli is responsible for performing life cycle assessments for our products, among other things. This systematic analysis of the materials reveals how circularity can be improved and the environmental impact can be reduced.

One thing is clear: in the circular economy, close cooperation is essential. “In the circular economy factory, I can demonstrate to our teams from Development, Procurement and Business Development in tangible terms what the circular economy will look like at V-ZUG”, says Frost. Collaboration with external partners is also crucial: “We were amazed at how willing our local suppliers were to embrace new ideas”, says Marcel Niederberger, Head of Sustainability. “Our efforts might not yet be clearly profitable, but in the long term, there are many benefits – for the environment but also in terms of supply chain security and our costs”, adds Niederberger.

The pilot project was financed with CHF 200,000 from the internal CO₂ fund. How and where the circular economy factory will someday be operated is still an open question. Today, we are already highly motivated to seize the many opportunities offered by the circular economy.

Contribution to SDGs 7, 9, 12 and 13



V-ZUG offers durable, resource-efficient appliances for the modern home. We are raising customer awareness of environmental protection with specific functions and making eco-friendly housekeeping straightforward. At present, our key focus is on the circularity of our products. Our aim is to manufacture products from sustainable materials and components that can be upgraded, repaired, reused, refurbished or recycled. That way, our high-quality appliances will remain in circulation for longer, reduce environmental impact and create long-term added value. Such circular approaches are necessary to make our economic system more resource efficient and decouple prosperity from environmental degradation. V-ZUG is able and willing to proactively lead the way here.



Healthy and committed employees

Consistent customer focus, a feel for top quality and precision, a strong spirit of innovation plus personal commitment and conviction every single day: our more than 2,000 employees are the driving force behind the success of V-ZUG. With them, we break new ground and uphold both our brand promise and the excellence of our “Swiss made” products. We provide a contemporary and inclusive working environment that meets high health and safety standards. We act in accordance with our core values, appreciate our diversity and drive our vision forward together.

For a forward-looking V-ZUG

Our company continues to undergo a profound transformation. Across all processes, we strive for the best possible quality and efficiency to ensure our customers are satisfied and our success is sustainable. This requires forward-looking management and an inspiring working environment that allow our employees to give their best for our brand. In recent years, we have enshrined our mission statement by setting out our vision, mission and core values and honed the principles of our collaboration. In 2023, we launched the previously piloted V-ZUG management principles for all executives. The principles are based on five central behaviours and competences that make for successful managers in difficult times. They create a management culture of mutual support and practical dialogue. The approach of collegial guidance strengthens the interdisciplinary cooperation in our management team. Our 250 executives have been put into 40 peer groups that support each other on a daily basis and exchange ideas.

Constructive feedback and active listening are the management principles that drive our dealings with one another. In many strategic initiatives, we deliberately opt for a bottom-up approach and inclusive communication, so everyone can contribute their thinking and ideas. Regular employee surveys are another tool for checking the pulse of our workforce. In 2023, we conducted a further global survey that, for the first time, was implemented digitally in all departments. The response rate was a high 85 %, and the results confirm that the measures taken are having a positive impact. 80 % of employees rate their situation at work as satisfactory. The workload figures improved significantly by 5 percentage points. In the 2021 survey, we ranked slightly below the Swiss benchmark for “work satisfaction”, “commitment” and “engagement” – but we matched it in 2023. This is a clear sign that the actions we have taken are having an impact. By contrast, satisfaction with company management declined several percentage points, which is understandable. The economic environment in 2023 was again difficult and the management of V-ZUG had to make unpopular decisions. The overall results give us grounds for confidence, and we will do all we can to keep our scores at a high level.

Efficient work made easy

Our stated target is to bring more simplicity and creativity into our customers' homes. We also want to make life simpler for our employees on a daily basis by offering flexible working arrangements. Following proven positive experiences, we further extended the “smart work” principles. Our teams set the rules for their cooperation jointly. Clear arrangements encourage a forward-looking approach to the potential drawbacks of flexible working; permanent availability and a high workload resulting from efficiency gains can be real stress factors. However, the data and feedback speak for themselves: employees feel more productive thanks to smart work, and they appreciate, for instance, the reduced commuting times. This latter point is also good for the environment (“Smart work – more productivity, less stress on the environment”, p. 46). We are also constantly optimising our working processes and increasingly turning to agile and digitalised procedures. We train our employees in “scrum” and “design thinking” methods and use the scaled agile framework to implement digitalisation projects. The new collaborative ways of working make us a dynamic employer and boost the employability of our staff.

Diversity: a fundamental attitude and a factor for success

Equality of opportunity is an essential core value in our corporate culture. We firmly believe that inclusiveness and diversity add value. Our employees bring a wide range of personal and professional backgrounds to the company, as well as their own cultural practices. Around 50 nationalities can be found in Zug alone. Respect, tolerance and appreciation of others are essential principles for our collaboration. No one should experience discrimination on the grounds of gender, age, origin or religious or political beliefs. The Human Resources (HR) department is represented on the V-ZUG Executive Committee, and inclusion and diversity are therefore embedded at the very highest level. This diversity of outlooks promotes innovation and makes us a strong and attractive employer. Moreover, at a time when skilled workers are in short supply and demographics are changing, an inclusive working environment is absolutely essential.

As an industrial company, we pay special attention to the gender mix and actively encourage its balance. Our aim is to have women representing 25% of the leadership team, including the Executive Committee and Board of Directors, by 2025. During the reporting year, this figure was again lower than desired at 20.8%, partly because we reclassified our levels of management the year before. Across the firm, 23.7% of our employees were women in 2023, 0.7 percentage points down from the previous year. Despite our considerable efforts, it remains a challenge to increase the proportion of women at the company in the short term. We have therefore decided to maintain the level of ambition behind our targets, but to change the target year to 2030.

We took further action in 2023 to attract more female workers and managers to V-ZUG. We introduced new standards and training in recruiting to prevent gender stereotyping and bias, which can have serious consequences. We also launched the “Trau dich!” (“Dare to lead”) campaign to boost women’s self-confidence. As part of this, 30 female employees were given an additional development consultation and attended an external seminar of their choice. Our “Be Aware” campaign saw activities promoting inclusivity and diversity in practice, and our dedicated women’s network regularly delivers initiatives. We promote awareness of diversity in the existing structures and think hard about our use of language and visual communication. We are constantly striving for a more inclusive mindset. Equal pay is already observed as a matter of course.

We are not only committed to a balanced mix of genders and generations, but also to the inclusion of people with disabilities. In cooperation with the Obvita Foundation, depending on the state of the order book, we employ between 8 and 15 people with a disability for simple tasks at the refrigerator factory building in Sulgen. Inclusion also means ensuring continued employment in connection with case management. At present, we are able to reintegrate around 70% of employees following an extended health-related absence.

V-ZUG: sustainably competent

Investing in the qualifications of our employees is key to V-ZUG remaining competitive. In the reporting year, we invested 0.62% of payroll spend in education and training, just below our target, and 1.39% of payroll spend in vocational training, in line with our target. Our training strategy and succession planning are based on an individual skills- and performance-based evaluation that uses the framework of the internal competency model. V-ZUGacademy is our internal training unit. We provide training sessions, development programmes and management education, and develop the offering to reflect needs. As a company that provides training, we also teach young apprentices: we had 89 in 2023. We now also offer apprenticeships for the Federal VET diploma as a road transport specialist. We are taking proactive steps to combat the shortage of skilled workers through sector-wide solutions, for example in the service technicians department, where we are working with other firms to design an apprenticeship for service technicians.

Healthy for today and tomorrow

As a company, we are only as strong and fit as our employees. Our occupational health and safety management programme is certified to ISO 45001. We also received the “[Friendly Work Space](#)” label in 2022. We regularly cover issues related to physical and mental health and provide relevant offerings. External counselling is available to our employees who find themselves in difficult situations or who have serious grievances.

During the reporting year, we enhanced our three-part occupational safety plan, which consists of regular inspections, low-level safety talks between line managers and their employees, and the occupational safety contacts (KoPAS). As of 2024, 26 trained members of staff will be active as KoPAS in their departments. Together with our occupational safety managers, they raise awareness of hazards and correct conduct across the company. As is the case each year, we ran a campaign again in 2023. Under the motto “Safe lifting and carrying”, we addressed the most frequent cause of accidents at V-ZUG. All managers also attended a half-day SUVA training session to make them aware of their legal responsibilities and the need to set an example. We achieved our target reduction in the accident rate in 2023. The number of accidents was down considerably from 88 in 2022 to 75. This represents a reduction of 15% (target: 5% reduction per year).



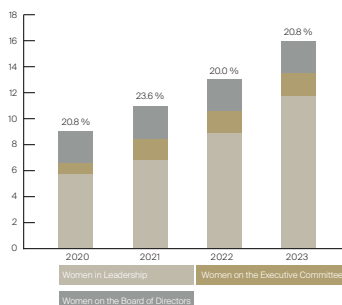
Headline image for the occupational safety campaign:
Lifting and carrying

Targets, facts and figures

Targets	Baseline and target years	Status
Occupational safety: vision “zero” and 5% annual reduction in the number of accidents	Annual review	Achieved
Long-term health: we will stabilise the absence rate by 2025 and lower it in the long term.	2020; 2025	On track
Investment in education and training: 0.65 % of payroll spend	Annual review	Not achieved
Investment in vocational training: 1.35 % of payroll spend	Annual review	Achieved
Diversity: we will increase the proportion of women across the Group.	k.a.; 2025 (new: 2030)	
1) In leadership team, incl. Board, 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) Delayed
Inclusion: employees feel included and show 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 “Healthy and committed employees” (abbreviated; details in the appendix to the Sustainability Report)
Possible statuses: Achieved, On track, Delayed, Not achieved (if new target: Initiated)

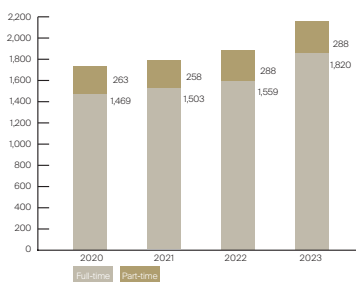
Women in management roles



Continued rise in number of women in senior management

The definition of senior management roles (leadership team) was revised, expanded and rolled out across the Group in 2022. The proportion of women in the leadership team rose 0.8 percentage points in 2023 from the previous year to 20.8%. Across the company in 2023, the proportion of women overall was 23.7%, and in all management roles it was 20.6%. Both figures declined slightly in the reporting year.

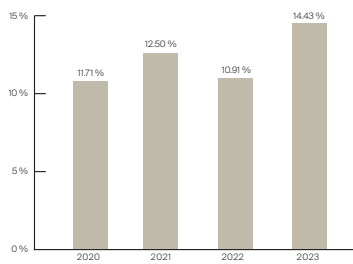
Permanent employees by part-time/full-time working hours*



Part-time: still a popular working model

Our employees are increasingly welcoming and taking up the option of tailoring working hours to their individual circumstances either at the start of or during their employment contract. The percentage of employees with flexible working hours (<100%) fell 1.93 percentage points from the previous year to 13.66%. This is attributable to the fact that we report the figures globally from 2023 and that less part-time work is performed outside of Switzerland.

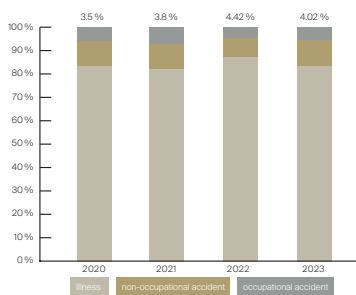
Turnover rate¹⁾



The turnover rate rose slightly

298 new employees joined in 2023. Over the same period, 308 people left the company. This equates to a turnover rate (excluding retirees and apprentices) of 14.43 %, up 3.52 percentage points compared to 2022.

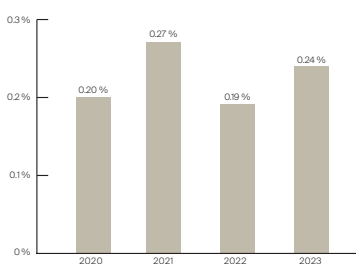
Absence rate by cause¹⁾



Sickness accounts for majority of hours lost

The lost hours rate for 2023 was 4.02 % (of contracted hours) in total, 0.4 percentage points lower than the previous year. Down almost 4 percentage points during the reporting year, illness was the most frequent cause of absence at 83.25 %. The number of lost hours due to workplace accidents increased 1.58 percentage points from the previous year, although the number of accidents fell compared to the previous year. The campaign run in 2023 to reduce accidents in the workplace is having an effect.

Hours lost due to occupational accidents¹⁾



Fewer occupational accidents recorded

V-ZUG recorded 75 occupational accidents during the reporting year. These generated a total of roughly 7,491 lost hours, or 0.24 % of contracted hours (2022: 0.19 %). We are putting targeted measures in place and raising awareness of hazards in the workplace and correct conduct across the company.

¹⁾ Values for production sites between 2020 and 2022, and globally for 2023.

Smart work – more productivity, less stress on the environment

How do we design our work to achieve both the best results for customers and ideal framework conditions for our employees? The answer is smart work: V-ZUG uses flexible working models. “We learned lessons from the COVID-19 pandemic and have carried forward the positive aspects from that time”, says Fabian Britschgi, Head of Corporate Health. After an evaluated pilot project in 2022, the smart work principles were rolled out across the company in the reporting year. Internal surveys indicate that smart work raises satisfaction with working conditions considerably. The team led by Roman Kaufmann, Head of Global Product Management Kitchen at V-ZUG, appreciate the flexibility in terms of where and when they work: “We are more motivated and more productive because our individual needs are better taken into account”, he says. However, if the collaboration is to work, clear agreements are needed: “Each team uses a team charter to discuss the principles and priorities that apply”, says Britschgi. It’s the only way everyone can rely on each other. “We plan our availability and set the rules together – that builds trust and helps us to create boundaries around work”, comments Kaufmann. In addition: “We have found the method that suits us, and our team spirit is just as high as it was before, even though we are present at different times”, he adds.

Smart Work lets us bring our interests as an employer as closely as possible into line with those of our employees. The programme promotes a work-life balance and has a positive impact on our ecological footprint. Like the mobility strategy we introduced in 2020, Smart Work also reduces motorised private transport, cutting emissions and the number of parking spaces needed. The latter fell 26% in 2023 compared to 2020. More sustainability and more satisfied teams in one – that’s smart.

Contribution to SDG 8



We influence SDG 8 by the way in which we shape the working environment and relationships, and by where we create jobs. We follow high standards in personnel management and invest in secure, attractive jobs, as well as in the skills and employability of all our staff. We thereby seek to create interesting prospects for employees and offer young people in particular outstanding apprenticeship training and exciting development paths. We promote diversity and equal opportunities, integrate people with disabilities and deliver equal pay for equal work.

Leadership Principles V-ZUG

Think customer first	Succeed together	Disagree and commit	Decide and act	Grow yourself and others
I strive for the best outcome to benefit our customers	I understand that making V-ZUG successful benefits us all	I seek opinions, discuss and commit	I take ownership and act as an entrepreneur	I take responsibility for my own development and that of others





Environment and climate protection

We are actively taking measures to reduce our environmental footprint. First and foremost, we avoid and reduce CO₂ emissions throughout the entire value chain. We use renewable energy sources, strive towards energy efficiency in new builds and renovations, and we are electrifying our service fleet. In addition, our CO₂ fund enables us to make climate-friendly investments. We are working on more environmentally friendly solutions with our suppliers and closing the loops in material and waste flows. We offset the remaining emissions with the “V-Forest”.

Achieving the “net zero” target by 2050 poses great challenges to our economy and society. As a company, we are making our contribution to the necessary transformation and proceeding with bold strides.

For the 2023 financial year, we are reporting in line with the rules of the Task Force on Climate-related Financial Disclosures (TCFD) for the first time. Our existing risk analysis process has been expanded for TCFD reporting. For the areas of governance, strategy, risk management as well as targets and key indicators, we disclose how certain climate-related risks and opportunities affect our company and how we deal with them. We see risks, for example, in “greenwashing”, in supply difficulties resulting from extreme weather conditions and in health-related productivity losses among employees. However, we also see great opportunities, such as the changing consumer preferences for energy-efficient appliances or new business models (TCFD; p. 164).

Comprehensive decarbonisation

In the reporting year, we implemented our new environmental policy that unequivocally sets down the following: We treat resources with care and endeavour to minimise our impact on the environment and continuously improve our products, services and processes. We assume responsibility for emissions generated along the entire value chain, including indirect upstream and downstream emissions. From how our suppliers extract raw materials to our production and the emissions generated in the use of our appliances: we take a wide range of measures and enter into partnerships to promote our goals. By 2030, we will reduce our Scope 1 and 2 emissions as per the Greenhouse Gas (GHG) Protocol by 80 % compared with the base year 2020. These are direct emissions from operations, which we can influence ourselves. With regard to indirect emissions in the upstream and downstream value creation chain (Scope 3), we will strive to achieve a reduction of 30 % over the same period. We are contributing to this goal by increasing the energy efficiency of our appliances and promoting the circular economy. A key part of this reduction also depends on the energy mix used by our customers, which is continuously improving with the expansion of renewable energies (electricity consumption during use).

Evidence-based measures

Since 2021, we have been drawing up business life cycle assessments for our three production sites in Zug, Sulgen and Changzhou. Together with our product life cycle assessments, this means we are quantifying all environmental impacts caused by our production processes, products and services throughout their entire life cycle. We calculate our ecopoints (EPs) using the recognised ecological scarcity method ([Mök2021](#)). The distribution of EPs indicates where we have the greatest leverage in reducing emissions in operations and with our products. We derive our ecological efficiency from our life cycle assessments. This describes environmental impact relative to net sales. By 2030, we want to increase our ecological efficiency by 40 % and decouple economic growth from environmental impact. Although we implemented all environmental measures, ecological efficiency could only be increased slightly due to lower net sales in the reporting year (+2 %). Compared to the baseline year of 2020, cumulative ecological efficiency amounts to + 23 %.

Internal CO₂ fund as a driver of innovation

Together with the Metall Zug Group, we launched an internal CO₂ offset levy in 2018. The Group companies pay CHF 120 into a fund per tonne of CO₂ emitted. This concerns all Scope 1 and 2 emissions as well as Scope 3 emissions from business flights. The voluntary CO₂ levy has proven to be a strong incentive for sustainable business decisions and is used to finance pioneering projects that might not yet be feasible from a purely economic perspective. The CO₂ fund promotes the transformation of the local energy supply, among other endeavours. The fund supports the [Association for the Decarbonization of Industry](#) to the tune of CHF 1 million, for example. Its goal is to produce environmentally friendly hydrogen through methane pyrolysis for use in high-temperature processes and in transportation. In 2023, the association identified the supplier of the demonstrator plant to

be connected to our high-temperature oven. The financial resources from the CO₂ fund enable us to participate in the endeavour to produce hydrogen commercially. Whether or not the association will be able to do so at attractive market prices will depend significantly on the future prices of green electricity. The CO₂ fund made even more investments possible in 2023, including the procurement of low-carbon-emissions steel ("Low-carbon-emissions steel in our supply chain", p. 60) and the piloting of our circular economy factory ("Products and services for a future-fit society", p. 33).

Sustainable energy systems and mobility

Achieving more sustainable development requires a rethink in the supply of energy. This entails costs and risks, but also releases powers of collaboration. Since December 2022, the Multi Energy Hub has been supplying our Zug site and the surrounding neighbourhood with renewable energy from photovoltaics, groundwater and lake water as well as process heat from our operations and neighbouring companies in a phased manner. In this way, we will reduce our future consumption of natural gas and thus our CO₂ emissions ("The cycle of energy", p. 54). With a financing boost from the CO₂ fund, Tech Cluster Zug is also reviewing the expansion of additional renewable energy. We already produce our own solar energy using photovoltaic systems installed on our factory roofs. The supply varies each month, and we are able to cover around 4% of our energy consumption with these systems on average. In Zug and Sulgen, we procure 100% Swiss hydropower. We are reducing the emissions from the consumption of diesel – a major driver of our environmental impact besides natural gas – by electrifying our vehicle fleet. In the reporting year, 18 electric service vehicles were commissioned and a further 32 are planned to follow. Together with AMAG, an important partner, we are working intensively on the necessary charging infrastructure for our service staff at home. Our new e-truck has been in service since October 2023. This was financed with CHF 200,000 from the CO₂ fund. At present, electric trucks cost around three times as much as conventional lorries but will pay for themselves over a period of ten years.

Smart material and waste flows

Environmental management at our Zug site is certified in accordance with ISO 14001. We are reducing our volume of waste and see unavoidable waste primarily as raw materials that we bring back into the cycle. We are working with external partners for this purpose, as well as revising our waste and disposal concept as a result of the site transformation. In the vertical factory, we are improving all internal and external goods and disposal flows. This will also have an effect on our suppliers' deliveries. Materials that we cannot recycle are disposed of appropriately. Around 80% of our waste is sent for recycling. We are aided with the recycling of returned and worn-out appliances by the nationwide return system operated by the SENS Foundation.

Offsetting for climate protection

Despite our efforts, we are not yet able to avoid all CO₂ emissions. Since 2020, we have been offsetting all Scope 1 and Scope 2 emissions as well as the Scope 3 emissions from our business flights using the CO₂ fund. This enables us to offer household appliances made using CO₂-neutral production. Our offsetting contributions go towards the "V-Forest", a reforestation project in Scotland in cooperation with the Ripa Gar Foundation. In addition to tree planting by volunteers – including team members at V-ZUG UK – the next stage was planned in 2023 for reforestation with 300,000 trees in the coming years.

Even the most energy-efficient household appliances cause emissions through electricity consumption when used. The amount of emissions produced depends on the energy mix. Alongside tips and tricks for using our products in a more environmentally friendly manner, we have been offering customers the opportunity to offset the CO₂ emissions of their appliances with just a few clicks in the [CO₂ web shop](#) since 2022. The estimated average consumption over a service life of 15 years is based on an internal calculation that takes into account eco-design guidelines and real-life figures from our repair service business. This results in the offset price based on CHF 40/t CO₂. A fully equipped kitchen can be offset with as little as CHF 120. Since the end of 2023, our CO₂ web shop has been available worldwide in a new design. Our customers across the globe can now offset the CO₂ emissions from their use of our appliances. To calculate the emissions, we apply the average consumer energy mix of the respective country.



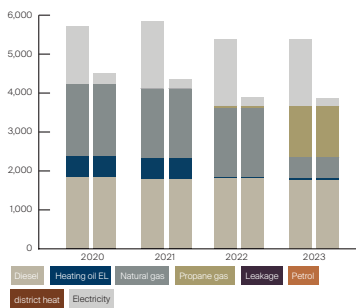
First electric truck in the V-ZUG fleet – vehicle lettering:
100 % electric – contributing to lower emissions

Targets, facts and figures

Targets	Baseline and target years	Status
CO₂ emissions		
To be CO ₂ -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
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	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)

CO₂ emissions (Scope 1 and 2) in t



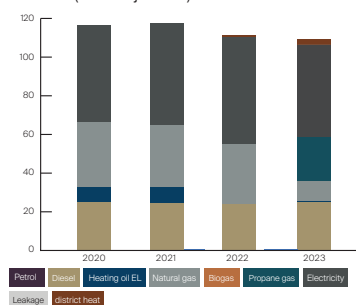
Transformation delayed: emissions remained constant compared with 2022 (+ 0.02 %)

With the heat pump in our new refrigerator factory building in Sulgen, we have completely eliminated emissions caused by heating oil at the old site in Arbon. In 2023, the expansion of the Multi Energy Hub at our Zug site to other buildings was delayed due to construction issues. As a result, temporary measures were put into operation using heating oil, with propane used to power boilers. The significant effect of the Multi Energy Hub on the reduction of natural gas and propane will only materialise in 2024. Total emissions, market-based: 3,690 t CO₂.

We are now showing the emissions generated by purchased electricity (Scope 2) twice: once as market-based (right-hand bar, purchase 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 (11 relevant categories) can be seen in the accompanying GRI index.

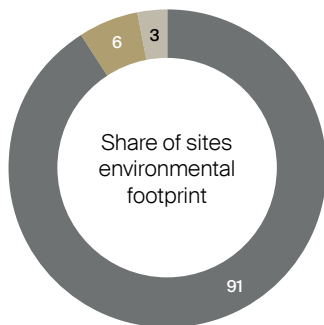
Energy consumption at V-ZUG by energy source (in terajoules)



Absolute energy consumption remains constant

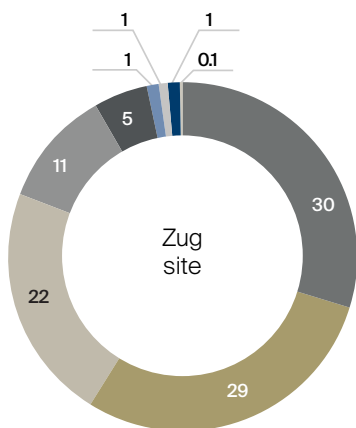
In 2023, V-ZUG's absolute energy consumption was 107.7 terajoules. This is composed as follows: electricity (46.18 %), natural gas (9.25 %), biogas (0.00 %), heating oil (0.89 %), propane gas (19.61 %) as well as diesel (21.51 %) and petrol (0.00 %) for our vehicle fleet. Compared to 2022, energy consumption remains relatively constant (reduction by 0.8 %).

Percentage share of sites in the overall environmental footprint



- Headquarter and Production, Zug **91%**
- Refrigerator factory, Sulgen **6%**
- Component production, Changzhou **3%**

Operational life cycle assessment for Zug site (headquarters), 2023



- Mobility **30%**
- Energy **29%**
- Consumables **22%**
- Logistics **11%**
- Catering **5%**
- IT Infrastructure **1%**
- Disposal **1%**
- Hazardous substances **1%**
- Water **0.1%**

Categories and subcategories	EPs (mPt)	Shares of the subcategories
Energy	3,962 (29%)	
Heat		80%
Electricity		20%
Hazardous substances	73 (1%)	
All hazardous substances		100%
IT infrastructure	158 (1%)	
Desktop		32%
Laptop		32%
Monitors		36%
Logistics	1,540 (11%)	
Internal trucks		100%
Mobility	4,051 (30%)	
Business travel		14%
Service		86%
Consumables	3,054 (22%)	
Paper		15%
Toner		0%
Packaging		85%
Catering	698 (5%)	
Food		67%
Drinks		33%
Water	16 (0.1%)	
Freshwater		100%
Disposal	145 (1%)	
Wastewater		12%
Composted		1%
Recycled		0%
Hazardous waste / chemicals in general		46%
Incinerated		41%
Total	13,968	

The cycle of energy

Where is the heart of our main site in Zug? It's in "ZUGgate". After all, that is where the Multi Energy Hub is located. This is a joint venture of Tech Cluster Zug AG and the local energy supplier WWZ AG. The independent and intelligently controlled energy system supplies our site and the surrounding neighbourhood with renewable energy from photovoltaics, groundwater and lake water as well as process heat from our operations and neighbouring companies. "The integration of both companies and households in a CO₂-neutral energy network is unique in Switzerland", says Carina Heuberger, our Director of Production Planning. In her previous role as Director of Lean and Operations Development, she saw how the heating and cooling plant was installed in our high-bay warehouse in 2021. "And that was during ongoing production, which was a challenge", as Peter Grossenbacher, Director of Infrastructure at V-ZUG, also recalls.

There was also no lack of challenges in 2023. On the one hand, the negotiations for energy contracts were rather protracted. "With such a complex undertaking with so many players, this is normal and we are satisfied with the outcome", notes Grossenbacher. On the other hand, the construction of the logistics tunnel was delayed, which meant that the "Mistral" and "Zephyr Hangar" buildings could not yet be connected to the Multi Energy Hub. This led to a continued need for natural gas in the reporting year, as well as a somewhat more modest emissions reduction than had been hoped.

The Multi Energy Hub is a pioneering project – and a venture. Our initial investments alone amount to almost CHF 5 million. However, Grossenbacher and Heuberger are in agreement: when all buildings, including the new office building "Zephyr West", are supplied with energy by the Multi Energy Hub in 2027, this will lead to a massive reduction in CO₂. "That's when we will finally see the full power of the Multi Energy Hub!", Heuberger says. Moreover: "The Multi Energy Hub is a powerful statement for our production site in Zug", says Grossenbacher with conviction.



1 Lake Zug

Circulago is a network that has been running under the city of Zug since 2020, which uses cold water from Lake Zug to heat and cool the buildings and factories of the city, including the V-ZUG headquarters. According to estimates, 25,000 tonnes of CO₂ are saved each year thanks to Circulago.

2 Groundwater

The waste heat from V-ZUG's production processes is fed into and stored in a water basin 140 metres beneath the city of Zug. In winter, the heat is pumped back into the V-ZUG buildings in an entirely emissions-free process.

3 Energy plant

The energy plant embedded in the "ZUGgate" logistics building is the heart of the Multi Energy Hub. It connects the district with Circulago and the groundwater via a system with three heat and cold accumulators, which regulate the warmth and cooling directed to the different buildings.

4 Waste heat from industrial processes

To keep energy waste as low as possible, some of the waste heat from V-ZUG's production processes is returned directly to the upstream system instead of the energy plant. This provides a further boost to the self-sufficiency of the site.

5 Waste heat from local companies

A local bakery sends the waste heat from its ovens directly to the V-ZUG network. Households and companies from the local area will soon also have the possibility to buy and sell energy through the Multi Energy Hub.

6 Photovoltaic system

Solar energy is generated using the photovoltaic system on the roofs and façades of the buildings and used for the energy supply of the networked buildings and for e-mobility.

7 Mobility Hub

The Mobility Hub parking garage is located just outside of the centre of Tech Cluster Zug, providing parking facilities for the employees of V-ZUG as well as local residents. The charging stations available here for electric vehicles are powered by energy from the Multi Energy Hub.

Contribution to SDGs 7, 9, 12 and 13



Climate change, environmental pollution and loss of biodiversity are global problems that affect us all. At the Tech Cluster Zug, V-ZUG is quite literally turning production upside down and reducing its ground footprint. The use of ecological construction solutions is creating innovative, sustainable workplaces. With pioneering projects such as the Multi Energy Hub, we want to send out a signal and make an impact. In Zug and in Sulgen, we are increasingly using renewable energy. At the same time, we are optimising our processes and machinery in order to manufacture V-ZUG appliances in an energy- and resource-efficient manner. An internal CO₂ levy provides specific incentives for this. We offset the remaining CO₂ emissions. The offset amounts support reforestation in our "V-Forest" project. This growing forest is removing CO₂ from the atmosphere and sequestering it for the long term. At the same time, it is helping to restore and boost biodiversity for years to come in a region that has been badly affected by deforestation.



Most recent production building: "Zephyr Ost"

Entrepreneurship for sustainable prosperity

We want to achieve sustainable success and thus create added value for society as a whole. For that reason, we are taking a long-term approach with our strategy and relying on strong partnerships. The production sites in Zug and Sulgen are keys to our success. That is where we develop innovative, future-fit business models.

Our brand promises quality, sleek design, durability and precision – values that are strongly associated with Switzerland. While having our production sites based in Switzerland entails entrepreneurial risks, such as high wage and infrastructure costs and the potential negative effects of economic policy developments in relation to the EU, these must be balanced against the advantages on which we have relied since our founding: innovation, a highly trained workforce, a small geographical scale, political stability and an efficient, modern infrastructure.

Yes to the innovation centre Switzerland

With our clear commitment to local production, we undertake to be a trustworthy partner for the communities where our sites are located, as well as for the innovation and commercial centre Switzerland and our suppliers, our customers and our employees.

We seek to protect local jobs and secure our site advantage. Together with our partner [Tech Cluster Zug](#), we are pushing ahead with the transformation at our main site in Zug with great pioneering spirit. As was the case last year, we invested more than CHF 50 million in new production facilities and buildings – and therefore in an attractive site that will appeal to further companies, researchers and talented people. Tech Cluster Zug represents a testing ground for sustainable showcase projects in the fields of living, building, working and mobility. Visions for a more future-fit society and economy are being realised here. In 2024, we will gradually bring our new “Zephyr Ost” production and assembly plant on line. This is a prime example of innovation in sustainable construction. It features a light structure using recycled concrete, which removes CO₂ from wastewater and permanently stores it, and has access to renewable energy from the Multi Energy Hub and its own photovoltaic roof. All of this significantly lowers the building’s environmental footprint (“Environment and climate protection”, p. 49). In 2023, we also awarded the contract for the construction of the administrative building “Zephyr West”. This represents the final construction project in the site transformation of V-ZUG for the time being.

Moreover, we seek to invest pension fund monies profitably, securely and sustainably. The V-ZUG pension fund is pursuing a sustainable strategy of investment. The assets of more than CHF 700 million are managed in accordance with ESG criteria, including investments in future-fit business areas – an added value for society as a whole.

Embedding sustainability with a broad impact

We manufacture appliances that are extremely energy efficient. We see a risk that our customers are not making full use of the opportunities provided by their V-ZUG appliances to save energy. In this regard, we are seeking to help them keep their footprint as small as possible. We offer energy-saving tips via the V-ZUG Home app and transparently display the energy consumption of the appliances each time they are used (“Products and services for a future-fit society”, p. 33). In addition, the CO₂ web shop that we rolled out internationally in 2023 offers a simple solution for offsetting emissions that result from appliance use in the form of the “V-Forest”. With our V-Kitchen app, we provide our customers with tips on healthy and sustainable nutrition (“Products and services for a future-fit society”, p. 33). We encourage our employees to adopt a long-term, sustainable diet and lifestyle through on-topic cinema evenings, e-bike test-riding days and weekly campaigns in the cafeteria, such as “Climate Friday” and “Too Good to Go”.

We feel that by making commitments that have a broad impact and by supporting projects, people, initiatives and organisations in a targeted manner, we have a great opportunity to master the necessary transformation towards a future-fit society. For instance, we co-founded the non-profit [“Association for the Decarbonization of Industry”](#), an initiative of Tech Cluster Zug (“Environment and climate protection”, p. 49). We have been supporting the climate initiative [Klima-Charta Zug+](#) since 2022. After providing start-up funding in 2022, we shared in particular our experience and knowledge based on best practices with the

members in 2023. As a sponsor of cultural and sporting events, we position our company at the heart of the community. We also regularly collaborate with universities. We provide input for lectures and support master's theses that are advantageous for all involved. We also engage with associations to advance industry-wide solutions. On the subject of the circular economy, we are achieving this through our CEO's membership on the SENS Foundation's Board of Trustees.

Genuine successes are based on fairness

We act responsibly and conduct our business honestly, fairly and in accordance with ethical considerations, and we comply with the applicable legal framework. This also includes protecting our customers' privacy and data rights.

Unethical business practices and compliance violations harbour high risks. For instance, were we to employ unethical procurement practices, this could compromise the physical or economic health of our suppliers. In such cases, we would have to expect legal consequences, damage to our reputation and financial penalties.

In March 2023, the Board of Directors and the Executive Committee enacted the revised Code of Conduct for V-ZUG Holding AG. It is based on our corporate values, applicable laws and regulations, the Universal Declaration of Human Rights and our internal policies. The Code of Conduct is binding for all employees of the V-ZUG Group and is part of the employment contract. We regularly conduct compliance audits. Any non-compliance must be reported to line management, the internal legal department or, for serious grievances, to the external reporting point of the 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. With this contemporary governance, we are protecting our brand and reputation from the consequences of improper conduct.

Responsibility throughout the value chain

Transparent, resilient supply chains as well as cooperative relationships with suppliers are key to our commercial viability and innovation. We are very focused on rigorously implementing our values and standards. The mere fact that about 25% of our Scope 3 emissions are directly related to the materials we purchase clearly shows the relevance of sustainable procurement ("Low-carbon-emissions steel in our supply chain", p. 60). Poor management of the supply chain can result in supply difficulties, deterioration in quality, damage to reputation and financial penalties. At the same time, poor due diligence may have a significantly negative impact on working conditions in the supply chain, people's quality of life and the environment.

Around 60% of our suppliers are based in Switzerland, and another 30% or so are located in nearby European countries. We obtain most of our electronic components from highly specialised markets in Asia; our procurement office in Shanghai assists us by contacting these suppliers directly.

We took 2023 as an opportunity to enhance our supplier management. For instance, we sharpened our procurement strategy, enacted the Code of Conduct for Suppliers, further consolidated the supplier network and subjected many of our suppliers to a due diligence review that also meets the requirements of the new Swiss Supply Chain Act (DDTrO, p. 178). The Code of Conduct for Suppliers, which was enacted and communicated in 2023, applies worldwide. By the end of 2023, 51% of suppliers had signed the Code of Conduct. It is intended to be a binding part of all supplier contracts by the end of 2024. The Code establishes our minimum expectations of our suppliers, their sub-suppliers, and their governing bodies and employees. Apparent or suspected violations are to be reported to our Compliance department without delay. The reporting point is open to suppliers as well as their employees. If a suspected violation is confirmed, we insist on measures to eliminate the violation or we terminate the business relationship with the supplier in question. We have a zero-tolerance policy concerning forced and child labour. No violations of the Code of Conduct for Suppliers were reported in 2023.

We view our collaboration with suppliers as a cyclical endeavour. When selecting them, we examine whether they meet our requirements. The objective is always to find suppliers with whom we can develop a long-term collaboration. They go through a challenging application process, which takes a variety of sustainability criteria into consideration, as well as self-assessments, financial information and, in some cases, a pre-audit.

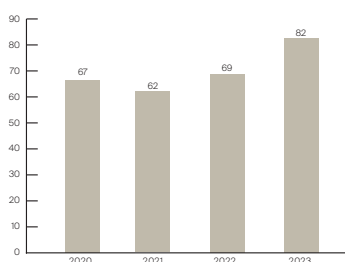
We work very closely with existing suppliers. We visit and audit them regularly and have annual meetings with them on site. With our proven tools “Sphera” (formerly “Risk Methods”) and “IntegrityNext”, we can monitor suppliers’ ESG and compliance performance daily with the aid of global real-time information. In the reporting year, no suppliers were excluded due to increased risk. In 2023, we audited a further 50 of our most important suppliers in terms of sustainability criteria. Together with the self-assessments in the previous year, this corresponds to 73 % of our purchasing volume. In 2024, we will globally introduce the supplier management platform “Tacto”, which we piloted in 2023. Since it is linked with “IntegrityNext”, the platform will enable us to structure our supplier management more efficiently and effectively.

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 19%

In the reporting year, we conducted 82 on-site supplier audits – a significant rise compared to the previous year. This shows how important it is to us for suppliers to meet our high requirements in terms of quality and sustainability.

Low-carbon-emissions steel in our supply chain

In global terms, we are not a big player when it comes to the procurement of steel and precious metals. Nevertheless, we believe that we can contribute to making the steel industry more environmentally friendly. How? Through partnerships. “For many of our suppliers, we are an interesting and challenging project partner – particularly because we’re not all that big, which enables us to act quickly and flexibly. That said, we have high demands in terms of quality and sustainability”, explains Erwin Käch, Category Manager at V-ZUG for 30 years. For the past 15 years, he has managed the supplier relationship with the Finnish company Outokumpu, the world’s leading manufacturer of circular, low-carbon-emissions stainless steel. We already use this for the tubs and internal door parts of our dishwashers. A lot has changed since Käch started working at V-ZUG. “Due to our growing demand for products that support the circular economy, I spent a lot of time in recent years studying sustainable materials, and I learned quite a bit in the process. It changed my perspective – and sharpened it.”

What does “low-carbon-emissions steel” mean in an industry that, according to the International Energy Agency (IEA), is responsible for 7 to 9% of the global CO₂ emissions caused by humans? Wherever possible, Outokumpu uses alternative energy for production and more than 90% recycled metal from its own scrap heap, which is Europe’s largest. At 0.5 t CO₂/t, what they call “Circle Green” steel has a CO₂ intensity that is nearly eleven times lower than the global average for steel used in industry. That is also helping to reduce the CO₂ component of our Scope 3 emissions. However, steel that is more environmentally friendly is expensive and thus not very competitive. “We want to change that. As a pilot customer, we are working closely with Outokumpu, helping to scale the Finnish company’s technology and make it more financially attractive”, explains Käch. We are financing the added costs of Circle Green steel through our CO₂ fund (“Environment and climate protection”, p. 49).

Contribution to SDGs 8, 9 and 12



Innovative solutions are the drivers for our future viability. We are purposefully boosting our internal innovative energy and strengthening it with external partnerships. This is also illustrated by the fact that we are investing in a modern, resource-efficient industry. At our sites, we are developing a sustainable, integrated infrastructure in dialogue with local stakeholder groups for the benefit of society, business and the environment. We are creating attractive industrial jobs and supporting local businesses by buying regional goods and services wherever possible. Through our cooperative relationships, we are promoting environmental and social standards along the entire supply chain. We are also committed to a sustainable business model. With transparent product information, we are facilitating sustainable consumption, raising customer awareness of environmental protection via our appliances, helping to reduce food waste and promoting healthy nutrition.



Door panel and base of the "Adora" dishwasher made from reduced-CO₂ stainless steel

Appendix to the report on non-financial matters



Contents of appendix to the report on non-financial matters

About non-financial reporting	136
Material topics: Framing and impact	137
Focus topic: Products and services for a future-fit society	137
Focus topic: Healthy and committed employees	138
Focus topic: Environment and climate protection	140
Focus topic: Entrepreneurship for sustainable prosperity	142
GRI index	144
Climate report (TCFD)	164
Due diligence obligations in the supply chain (DDTrO)	178
Targets and status	180
Focus topic: Products and services for a future-fit society	180
Focus topic: Healthy and committed employees	182
Focus topic: Environment and climate protection	184
Focus topic: Entrepreneurship for sustainable prosperity	186

About non-financial reporting

This report on non-financial matters is being included as an integral part of the Annual Report of V-ZUG Holding AG for the first time. It focuses on the non-financial reporting of V-ZUG Holding AG. It is also available to download on our website as a stand-alone report. This Sustainability Report covers the significant economic, environmental and social impacts of the three production sites of V-ZUG Holding AG (V-ZUG Group): V-ZUG AG, headquartered in Zug, V-ZUG Kühltechnik AG, with registered office in Sulgen, and the foreign subsidiary V-ZUG (Changzhou) Special Components Co. AG., 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 for the period from 1 January 2023 to 31 December 2023 and in accordance with the regulatory requirements for non-financial reporting in Switzerland (Article 964a et seq. CO). The full Sustainability Report, together with the Annual Report, was approved and physically signed by the Board of Directors on 11 March 2024.

The previous Sustainability Report was published in spring 2023, covering the period from 1 January 2022 to 31 December 2022.

The four sections “Products and services for a future-fit society”, “Healthy and committed employees”, “Environment and climate protection” and “Entrepreneurship for sustainable prosperity” reflect our focus topics and describe the risks and opportunities, management approaches and campaigns, strategic objectives and KPIs associated with our material topics (“Materiality matrix”). We updated our materiality matrix in 2021 following extensive dialogue with our stakeholder groups (chapter: “Strategy and sustainability”).

A total of 1,790 FTE employees (excluding temporary employees) are included within the scope of the report, including the key figures for 2021 to 2023. This equates to 85% of the total number of V-ZUG Group employees, which, on 31 December 2023, amounted to 2,108 FTEs (including temporary employees).

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

We are publishing this non-financial report for the eleventh time. We seek to depict progress and challenges regarding our commitment to sustainability in a transparent, comprehensible and verifiable manner. We will be pleased to receive any questions or feedback via marcel.niederberger@vzug.com.

Material topics: Framing and impact

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

Issue 1: Circular product design

Description:

The following aspects are considered at a very early stage of product development:

- Resource-efficient design: Energy efficiency and water efficiency of the product
- Ecological functions: Integration of functions to enable products to be used ecologically
- Materials used, for example, recycled, environmentally friendly and recoverable materials; hazardous substances
- Durability
- Ease of repair e.g. spare parts management
- 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.
- Recyclability
- End of life: e.g. second life, second-hand sales, upcycling
- Primary packaging

Impact:

- Environmental impact of appliances throughout their entire lifespan: Climate change, quality of water, soil and air, biodiversity, etc.
 - Influence on material innovations for the materials used and also primary packaging (development, commercial viability, etc.)
 - Role model / innovator within the industry for championing sustainability and therefore influencing competitors / the market and other players e.g. recycling partners)
 - Maintaining the value of V-ZUG appliances throughout their lifespan, thereby influencing users' prosperity
 - Keeping resources in circulation for as long as possible in tip-top condition
-

Issue 2: Sustainable consumption and healthy eating (by users)

Description:

- Quality products that provide long-term benefits: This is about the product not only having a long lifespan, but also being very user friendly, e.g. because it can be updated and repaired.
- Sustainable use: Users are familiar with options that enable appliances to be operated resource-efficiently, and make use of these.
- Quality of life and a healthy lifestyle: V-ZUG products contribute to a high quality of life, e.g. by helping to reduce the time taken for domestic chores and by assisting users to eat healthily.
- Sustainable lifestyle: This relates to the product helping users to eat in a climate-friendly manner and minimise food waste.

Impact:

- Influence on user health, e.g. by promoting a more healthy, balanced diet
 - Ecological households: The environmental impact (influence on climate change, water quality, biodiversity, etc.) of users when they use V-ZUG appliances, e.g. by using appliances that are more resource-efficient in general, using specific ecological functions, avoiding food waste and promoting a climate-friendly diet
 - Encouraging and making it easier for users to behave sustainably
 - Environmental awareness of users and society in general
 - "Consumerism"/consumer behaviour in relation to V-ZUG appliances
 - Maintaining the value of V-ZUG appliances throughout their lifespan, thereby influencing users' prosperity
-

Focus topic: Healthy and committed employees

Issue 3: Health and safety of employees

Description:

- Mental and physical health: By this, we mean both preventative and accompanying measures that contribute towards health in the workplace (in the office or at home) and 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 personifying a culture of health and safety within the company. Key influential methods include HR management and communication.
- Occupational safety and workplace conditions: Employees should be safe at their workplace. This is about safe workplaces in areas such as production, and suitable occupational safety measures, such as protective clothing. Healthy workplace conditions generally involve setting up all workplaces so that they are as conducive to health as possible, e.g. in terms of ergonomics, noise emissions and temperatures.

Impact:

- Short-term and long-term physical and mental health of employees, with an impact on their employability and therefore their independent economic well-being (job security and prosperity)
 - Impact on the health and social insurance system (including health costs)
 - Influence on the health-conscious and health-promoting behaviour of employees and indirectly on people with whom they come into contact
 - Perception and importance placed on health in society (indirectly)
 - Balanced, resilient employees
-

Issue 4: Developing potential and managing expertise

Description:

- Employability: By this, we mean the employability of our staff, which it makes sense to enhance and maintain. Development measures may vary depending on their age, profession and potential.
- Education and training: This concerns the technical, methodological and social development of employees, and also training positions, such as apprenticeships and internships.
- Career development: Employees should have the opportunity for advancement. Career development enables prospects to be highlighted and the associated development to be fostered.
- Successful targeted recruitment: This aspect includes the extent to which we are able to find and successfully recruit suitable employees.
- Targeted retention management: How much fluctuation of what type is desirable or harmful? Targeted retention management optimises social and corporate responsibility.
- Identifying, promoting and exploiting potential: The focus here is on successfully exploiting potential. The first step here is to identify it and then, only after that, to promote and exploit it.
- Succession planning and managing expertise: This is about how to retain employee expertise within the company and make it usable by all employees. This also includes internal succession planning for key personnel and jobs.

Impact:

- Attractiveness to the workforce on the local labour market: attractive site / innovative capacity / availability of qualified manpower
 - Employability and therefore the ability of employees to independently and sustainably secure their economic well-being (job security and prosperity)
 - Employee satisfaction
 - Employer reputation: Exemplary role and standard-setter on the labour market in terms of employer attractiveness, employee development, etc.
-

Focus topic: Healthy and committed employees

Issue 5: Diverse and inclusive working culture

Description:

- Equality: This relates here to equal opportunities and equal treatment, and covers issues such as equal pay and career opportunities.
- An integrative participatory culture that affirms diversity: The focus is on subjects such as respect, openness, tolerance and mutual appreciation.
- Ban on discrimination: This aspect of risk relates to how discrimination is prevented and how possible incidents are dealt with 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: This is about forms of work that promote a diverse and inclusive work culture, such as part-time working, job sharing and interdisciplinary collaboration.

Impact:

- Attitudes and behaviour with regard to diversity and inclusion of employees, which may also influence their personal social sphere (indirect impact on inclusion in society as a whole / equal opportunities for the local community)
 - Expansion of opportunities for people who are disadvantaged and/or affected by discrimination on the labour market
 - Long-term employment for employees across various stages of their life, thereby giving them economic security (job security and prosperity)
 - Role model and influence on competitors and other companies with regard to flexible working and forms of work (perhaps also with regard to other subsidiary aspects of the issue, but these tend to be less visible)
-

Focus topic: Environment and climate protection

Issue 6: Resource-efficient sites (operations)

Description:

- Energy management: What energy mix are we using? Are we investing in renewable energy (e.g. photovoltaics)?
- Energy-efficient production: This relates to the energy consumption of machinery, plant and processes, as well as analysing and optimizing this.
- 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 the electricity used (Scope 2).
- Water management: This has to do with the efficient use of water as a resource, and 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 and timber, and adherence to sustainability standards for construction. It also includes the energy consumption of buildings.

Logistics and waste management are explicitly excluded, and are addressed as separate issues.

Impact:

- Climate change, local biodiversity and the quality of water, soil and air as a result of environmental pollution and resource consumption
 - The dissemination of environmentally friendly technology and solutions (through pilot projects and increasing their cost-effectiveness), e.g. in the fields of energy systems and construction methods
 - Role model/inspiration, e.g. via flagship projects, thereby influencing the behaviour/investment decisions of other stakeholders
 - Quality of life at sites (e.g. water and air quality)
-

Issue 7: Operational waste management

Description:

- This issue covers the following categories of waste:
 - Production waste (metal, plastic, special waste, etc.)
 - Operational waste (office, food, electronics, etc.)
 - Secondary packaging (wooden pallets, cardboard, film, polystyrene, etc.)
- Waste reduction: This relates to measures for reducing waste, particularly that which cannot be reused or recycled.
- Waste collection and declaration
- Reuse
- Recycling
- Proper disposal of waste that cannot be reused (oil, hazardous substances, etc.)

Impact:

- Climate change, local biodiversity and the quality of water, soil and air as a result of environmental pollution and resource consumption
 - Material innovations, e.g. for packaging (impact on development, commercial viability, etc.)
 - Consumer behaviour through the provision of new services and launch of new business models, e.g. sale of used appliances
-

Focus topic: Environment and climate protection

Issue 8: Logistics and mobility

Description:

The particular focus here is on the greenhouse gas emissions resulting from the following aspects:

- Upstream and downstream logistics: This relates to the logistics further up and further down the value chain.
- Intra-company logistics: This has to do with issues such as optimising transport between V-ZUG sites (incl. route planning).
- Warehouse management: Optimal warehouse size and efficient warehouse management are paramount here.
- Fleet management: This has to do with the type of vehicles and their powertrain technology.
- Business travel
- Commuter traffic: The focus here is on using different means of transport to and from work (employee mobility).

Impact:

- Environmental pollution and resource consumption: Climate change, the quality of water, soil and air, etc. (e.g. via emissions, microplastics, the pollution of marine ecosystems e.g. by contaminants or noise emissions)
 - Impact on behaviour/awareness of employees and logistics partners
-

Focus topic: Entrepreneurship for sustainable prosperity

Issue 9: Responsible and resilient supply chain

Description:

- Supplier management: This concerns structuring the supplier–customer relationship, building and maintaining a supplier base, appropriate risk management and security of supply.
- Stable partnerships: This relates to partnerships that are based on trust and contribute towards the resilience of the commercial chain.
- Sustainable procurement guidelines: This is about demanding, auditing and practising standards regarding ecology, social responsibility and economic efficiency in the supply chain.
- Traceability and transparency: This has to do with creating the greatest possible transparency with regard to individual supply chains, thereby ensuring that individual responsibility can be assumed.
- Capacity building: This involves helping players within the supply chain to expand and improve their skills.

Impact:

- Impact on suppliers' sustainable behaviour (employee welfare, environmental impact, etc.)
 - Creating and safeguarding jobs and thereby economic development at sites
 - Knowledge transfer and mutual learning with an impact e.g. on supplier innovation
 - Role model and standards in supply chain management
-

Issue 10: Long-term corporate success as added value for society

Description:

- Profit and productivity: This has to do with long-term corporate success, which is a fundamental prerequisite for investment in general and for the benefit of sustainability.
- Innovation: This relates to product and process innovation, as well as innovative business models.
- Doing business within planetary limits: This is about taking account of the ecological limits of our planet when using natural resources and polluting the environment.
- Investment for a future-fit society: This may involve investment in infrastructure projects or the investment philosophy of the V-ZUG pension fund.
- Site policy and its indirect economic impacts: This relates to aspects such as the impact of our commitment to Switzerland as well as developing the expertise hub and boosting innovation at the site.
- Partnerships, joint ventures and collaboration: Added value and innovation often have their roots in partnerships, and some challenges necessitate working with other organizations. Collaboration may be undertaken with a large number of players from the fields of research, academia, business networks, associations, business partners, the public sector, charitable organisations, etc.

Impact:

- Safeguarding jobs for employees (through stable profits and productivity)
 - Influencing public debate (on sustainability in general, players involved in long-term site policy, etc.), e.g. by injecting dynamism
 - Economic (and therefore social) development of sites, e.g. by creating varied jobs and training positions
 - Impact on site attractiveness
 - Impact on quality of life at sites
 - Impact on sustainable infrastructure development at sites
 - Multiplier effects in partnerships
 - Impact on the innovative capacity of partners and the site in general
-

Focus topic: Entrepreneurship for sustainable prosperity

Issue 11: Business ethics and compliance

Description:

- Corporate ethics (code of conduct): This is about how V-ZUG carries out its business activities. As well as legal compliance, there is the particularly important matter of whether business operations are 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.
- Policy management (internal): 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 stakeholder groups are able to form a truthful and complete picture of the company.
- Product safety: This has to do with ensuring products can be used without danger.
- Standards: Application and compliance with mandatory and voluntary standards, e.g. relating to product quality or management systems for quality, the environment, staff, etc.
- Data management: This is about dealing with sensitive internal and external data.

Impact:

- Role model and inspiration for other players
 - Trust/mistrust in company/private business in general
 - Impact on the regulatory environment that affects the company (e.g. in the event of non-compliance, lack of transparency, etc.)
 - Safety/health of users
-

GRI index

The following GRI index is based on V-ZUG's current materiality matrix, which we drew up in 2021 with input from external and internal stakeholders. Relevant information is presented transparently in this combined 2023 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	Art. 964b OR	SDG	Page
Products and services for a future-fit society	Circular product design	GRI 301, GRI 306	Environmental concerns, Article 964b para. 1 and 2	7, 9, 12, 13	P. 33
	Sustainable consumption and healthy nutrition	GRI 416	Social concerns, Article 964b para. 1 and 2		
Healthy and committed employees	Health and safety of employees	GRI 403	Employee concerns, Article 964b para. 1 and 2	8	P. 41
	Development of potential and know-how management	GRI 401, GRI 404	Employee concerns, Article 964b para. 1 and 2		
	Diverse and inclusive working culture	GRI 405	Employee concerns, Article 964b para. 1 and 2		
Environment and climate protection	Resource-efficient operations	GRI 302, GRI 303	Environmental concerns, Article 964b para. 1 and 2	7, 9, 12, 13	P. 49
			Climate reporting pursuant to the TCFD		P. 164
	Logistics and mobility	GRI 305	Environmental concerns, Article 964b para. 1 and 2		
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	8, 9, 12	P. 57
			Child labour and conflict materials (DDTrO)		P. 178
	Long-term corporate success as added value for society	GRI 201, GRI 203	Social concerns, Article 964b para. 1 and 2		
	Business ethics and compliance	GRI 2-23, GRI 419	Prevention of corruption, Article 964b para. 1 and 2		

GRI: Global Reporting Initiative

Art. 964b OR: Code of Obligations, transparency on non-financial matters

SDG: UN Sustainable Development Goals

TCFD: Taskforce for Climate-related Financial Disclosure (Climate Report)

DDTrO: Ordinance on Due Diligence and Transparency regarding Minerals and Metals from Conflict-Affected Areas and Child Labour

General details

Indicator	Description	Comment/reference
Foundation (2021)		
GRI 1	Principles	V-ZUG Holding AG has reported in accordance with the GRI Standards for the period from 1 January 2023 to 31 December 2023.
The organisation and its reporting practices (2021)		
GRI 2-1	Organisational details	V-ZUG Holding AG Company limited by shares under Swiss law; listed on the SIX Swiss Exchange stock market Headquarters: Zug, Switzerland See chapter "The V-ZUG Group in the Annual Report 2023"
GRI 2-2	Entities included in the organisation's sustainability reporting	The Annual Report covers the companies that make up V-ZUG Holding AG. Unless otherwise stated, the Sustainability Report 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"). The Annual Report (Financial Report) covers all the V-ZUG Group companies owned directly or indirectly by V-ZUG Holding AG. Entities are consolidated in line with the consolidation approach. See 2023 Annual Report.
GRI 2-3	Reporting period, frequency and contact point	V-ZUG reports annually for the financial year, 1 January 2023 to 31 December 2023, reporting date: 31 December 2023 The Sustainability Report is being included as an integral part of the Annual Report for the first time. The resulting Annual Report is produced annually for the previous financial year (1 January 2023 to 31 December 2023, reporting date: 31 December 2023). The previous Sustainability Report was published on 28 April 2022. The contact person for questions is Marcel Niederberger, Head of Sustainability; marcel.niederberger@vzug.com
GRI 2-4	Restatements of information	The method for collecting the operational life cycle assessment data was refined, and figures for packaging material and hazardous substances were corrected. This has been retroactively adjusted for 2021 and 2022. The method for collecting Scope 3 emissions was refined and adjusted retrospectively (purchased goods and services: change from spend-based method to detailed product life cycle assessments for each product category and amount sold). A new source with a new emissions factor (0.112 tCO ₂ /kWh) is used for Scope 2 emissions for electricity in 2023. This is applied retrospectively for previous years (previously: 0.096 tCO ₂ /kWh).
GRI 2-5	External assurance	Our Scope 1 and 2 CO ₂ emissions (including offsetting) were validated externally by Swiss Climate. The Sustainability Report has not been externally audited as a whole.

Indicator	Description	Comment/reference
Activities and employees (2021)		
GRI 2-6	Activities, value chain and other business relationships	<p>Industry: Household appliances</p> <p>Business model: Development, manufacture and sale of large household appliances (e.g. washing machines, ovens, refrigerators, etc.) Current product range at www.vzug.com/products</p> <p>Value chain: V-ZUG has its own sales companies in Australia, Austria, Belgium, China, Denmark, France, Germany, Ireland, Hong Kong, Luxembourg, the Netherlands, Norway, Singapore, Thailand, the United Kingdom and Vietnam. V-ZUG products are also available via distributors in Israel, Italy, Lebanon, Turkey, Ukraine and the USA. V-ZUG serves a total of 23 markets including Switzerland, its home market.</p> <p>Business relations with Russia have been suspended due to sanctions. Business relations still exist with Ukraine, but there was no demand for appliances due to the war.</p> <p>See chapter "Strategy and sustainability"</p> <p>Organisational supply chain: 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>See chapter "Entrepreneurship for sustainable prosperity"</p> <p>Downstream activities and entities: Private customers, specialist retailers, property management companies and real estate owners.</p> <p>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. 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>See chapter "Company profile", "Products and services for a sustainable society"</p> <p>Other relevant business relationships:</p> <p>Strategic partnerships:</p> <ul style="list-style-type: none"> • Tech Cluster Zug AG, Zug • Universities and higher education establishments: HSLU, ZHAW, HWZ, FHNW, OST, ETH, EMPA • SENS – Foundation for recycling electrical and electronic appliances <p>Social engagement: 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>

Indicator	Description	Comment/reference
GRI 2-7	Employees	<p>Total number of employees plus breakdown by gender and region:</p> <ul style="list-style-type: none"> • Women: 500 • Men: 1,608 <ul style="list-style-type: none"> • Switzerland: 1,863 • Europe (excluding Switzerland): 81 • Asia: 140 • Australia: 24 <p>Total number of employees with permanent contracts:</p> <ul style="list-style-type: none"> • Women: 443 • Men: 1,492 <ul style="list-style-type: none"> • Switzerland: 1,764 • Europe (excluding Switzerland): 81 • Asia: 68 • Australia: 22 <p>Total number of employees with fixed-term contracts:</p> <ul style="list-style-type: none"> • Women: 57 • Men: 116 <ul style="list-style-type: none"> • Switzerland: 99 • Europe (excluding Switzerland): 0 • Asia: 72 • Australia: 2 <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"> • Women: 335 • Men: 1,485 <ul style="list-style-type: none"> • Switzerland: 1,580 • Europe (excluding Switzerland): 79 • Asia: 140 • Australia: 21 <p>Total number of part-time employees:</p> <ul style="list-style-type: none"> • Women: 165 • Men: 123 <ul style="list-style-type: none"> • Switzerland: 281 • Europe (excluding Switzerland): 2 • Asia: 0 • Australia: 3 <p>V-ZUG's business operations do not cause any significant seasonal fluctuations in headcount. The 2023 figures relate to the V-ZUG Group (previous years: production sites)</p>
GRI 2-8	Workers who are not employees	<p>Temporary workers, appointed via external agencies: 11 External contractors (support): 119 The 2023 figures relate to the V-ZUG Group (previous years: production sites)</p>

Indicator	Description	Comment/reference
Corporate management (2021)		
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"> • CEO V-ZUG Group: Digital Transformation, Sustainability • International department: Market Subsidiaries, Distributors, OEM Business, Business Development • Finance department: Group Finance and Controlling, Business Controlling, Legal and Compliance • Swiss Market department: Project Office, Controlling, Marketing, Customer Care, Field Service, Sales • Operations department: Supply Chain Management, Project Management, Global Quality Management, Industrial Engineering, Cross Product Manufacturing, Manufacturing, Procurement, Infrastructure • Engineering department: Product Segments, Quality & Cost, Mechanical Design, Software & Electronics, Competence Centre, Technology & Innovation, Corporate Design • Human Resources department: Competence Centre, Services & IT Projects, Business Partners, Vocational Training • Marketing department: Global Product Management, Global Marketing and Communications, Communications Process Centre, Global Commercial Excellence <p>Committees responsible for decision-making on environmental and social topics:</p> <ul style="list-style-type: none"> • Executive Committee (hereinafter "EC") • "V-ZUG Sustainability Workforce" working group led by the Head of Sustainability • Internal auditors for quality, environment and occupational safety <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 shares and remains an anchor shareholder.</p> <p>See "Spin-off and listing" on our website.</p>
GRI 2-10	Nomination and selection of the highest governance body	See 2023 Annual Report.
GRI 2-11	Chair of the highest governance body	The Chair of the highest governance body is Oliver Riemenschneider. Like all members of the Board of Directors, he is non-executive. See 2023 Annual Report.
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	<p>Material 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 Working Group.</p> <p>At the four regular BoD meetings each year, information regarding sustainability issues is regularly presented and/or proposals are submitted for decisions.</p> <p>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>The Sustainability Report was integrated into the Annual Report for the reporting year and approved by the BoD.</p>

Indicator	Description	Comment/reference
GRI 2-13	Delegation of responsibility for managing impacts	<p>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.</p> <p>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.</p>
GRI 2-14	Role of the highest governance body in sustainability reporting	<p>The Sustainability Report was integrated into the Annual Report for the reporting year and approved by the BoD.</p> <p>See "Interview with CEO Peter Spirig".</p>
GRI 2-15	Conflicts of interest	<p>Conflicts of interest must be disclosed and are avoided where possible. Failing this, members shall abstain from voting on any matter in which they have a conflict of interest (see "Organisational regulations" at https://www.vzug.com/ch/en/corporate-governance).</p>
GRI 2-16	Communication of critical concerns	<p>Compliance-related matters must be reported to the official reporting point (compliance@vzug.com). 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 2023, two cases were reported via compliance@vzug.com and dealt with by V-ZUG. No cases were reported via the external reporting point (The Swiss Crisis Intervention Foundation). Such reports are treated in confidence.</p>
GRI 2-17	Collective knowledge of the highest governance body	<p>The topic of "sustainable development" is discussed at all 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.</p>
GRI 2-18	Evaluation of the performance of the highest governance body	<p>The performance of the BoD is not evaluated externally. The BoD conducts an annual self-assessment.</p>
GRI 2-19	Compensation policy	<p>See 2023 Annual Report, chapter "Compensation Report".</p>
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 2023 Annual Report, chapter "Compensation Report".</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. See 2023 Annual Report, chapter "Compensation Report".</p>

Indicator	Description	Comment/reference
Strategy, policies and practices (2021)		
GRI 2-22	Statement on sustainable development strategy	See "Interview with CEO Peter Spirig".
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 contains a stronger commitment to human rights and sets out the principles of good corporate governance as part of our 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"> • ISO 9001 certificate (Zug site) • ISO 14001 certificate (Zug site) • ISO 45001 certificate (Zug site) <p>The Code of Conduct and the Code of Conduct for Suppliers contain a zero-tolerance stance towards forced labour and child labour.</p> <p>V-ZUG's key mission statements, codes of conduct and principles (see website) are:</p> <ul style="list-style-type: none"> • Code of Conduct of the V-ZUG Group (see website, "Corporate Governance"), including guidelines for ethical business decisions • Code of Conduct for Suppliers (see website, "Corporate Governance") • Anti-corruption regulations (see website, "Corporate Governance") • Vision, mission and core values • Principles of collaboration • Terms of Employment (TOE) • Annex 1 to the TOE (ethical principles) • ISO 9001, 14001 and 45001 certificates (including annexes, accessible via website) • EU General Data Protection Regulation • Swiss Data Protection Act • Internal competency model <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. The Code of Conduct is available on our 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>If the Code of Conduct for Suppliers is breached, action plans will be drawn up together with our suppliers. In the case of insufficient progress or repeated breaches of the Code of Conduct for Suppliers, the partnership will be 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 our Code of Conduct have a duty to report such behaviour to their manager or, ultimately, to 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 (e.g. bullying, sexual harassment).</p>
GRI 2-27	Compliance with laws and regulations	<p>V-ZUG complies with laws and regulations worldwide.</p>
GRI 2-28	Membership associations	<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"> • aha! Swiss Allergy Centre (joint venture) • amk – “The Modern Kitchen” working group • Economiesuisse • Electrosuisse – Association for electrical, energy and information technology • EEBUS – Empowering the digitalisation of Energy transition • ETH Foundation • Europa Forum / Lucerne Dialogue • FEA (the Swiss association for household and commercial appliances), board member • IG exact (Excellence in Applied Electronics and Technologies) • Zug+ Climate Charter Initiative • Küche (the Swiss kitchen association), board member • PWN Professional Women’s Network • SWISSMEM, the Swiss association for mechanical and electrical engineering industries, board member • SENS eRecycling, foundation for recycling electrical and electronic appliances, board of trustees • sia – Swiss Society of Engineers and Architects • Suissetec • Switzerland Innovation Park Central (member) • tfz – Technologie Forum Zug (board) • öbu – Swiss Business Council for Sustainable Development • Association for the Decarbonization of Industry • Zug Chamber of Commerce, member (board) • Zurich Chamber of Commerce

Indicator	Description	Comment/reference
Stakeholder engagement (2021)		
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 our materiality process (last revised in 2021), we consulted 68 representatives of V-ZUG's central stakeholders in an online survey. These included the Board of Directors, Executive Committee, 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"> • Customers: customer surveys, customer contact (around 300 service technicians in field sales and customer service), customer magazine ("ZugerRötel" in the Swiss market, "V-ZUG Inspirations" in international markets), guided tours of 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. • 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) • Investors/shareholders: General Meetings, Annual Report, investor roadshows • Suppliers: supplier audits • Sales partners: annual product presentation and various symposiums, trade fairs and events • Trade unions: within the context of the collective employment agreement (CEA) • Media: information provided by Corporate Communications & Investor Relations • Research and education: board activities (e.g. on the board of the MINERGIE association), participation in working groups with educational institutions
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 in case of 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 Kühltechnik) and the Changzhou site in China are not subject to a collective bargaining agreement. V-ZUG Kühltechnik 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	Our list of material topics was last revised in 2021. As a first step, the Sustainability Workforce revised the list of potentially relevant sustainability topics. We then combined these 11 topics into four priority areas and consolidated them to form groundbreaking focus topics. These provide the structure for our reporting. To achieve broad-based support for our materiality process, we consulted 68 representatives of V-ZUG's central stakeholders in an online survey. These included the BoD, EC, employees, customers, partners, suppliers, banks, investors and representatives from politics and academia. The results were subsequently discussed and finalised with selected members of the EC and the BoD. Here, too, we based our deliberations on the findings of our life cycle and CO ₂ assessments. We then drew up an appropriate materiality matrix. See chapter "Strategy and sustainability" and overview "Material topics: Framing and impact".
GRI 3-2		List of material topics	See chapter "Strategy and sustainability".

Products and services for a future-fit society

Circular product design

GRI 3-3		Management of material topics	See "Products and services for a future-fit society", "Environment and climate protection" and overview "Material topics: Framing and impact".																												
GRI 301 Materials (2026)	GRI 301-1	Materials used by weight or volume	<p>Materials used by type (in tonnes):</p> <table border="1"> <thead> <tr> <th>Type of material</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Iron</td> <td>7,426</td> <td>8,031</td> <td>5,651</td> </tr> <tr> <td>Stainless steel</td> <td>1,755</td> <td>1,711</td> <td>1,378</td> </tr> <tr> <td>Aluminium</td> <td>229</td> <td>148</td> <td>195</td> </tr> <tr> <td>Non-ferrous metal</td> <td>94</td> <td>80</td> <td>77</td> </tr> <tr> <td>Oils, fats, lubricants</td> <td>21</td> <td>16</td> <td>10</td> </tr> <tr> <td>Hazardous substances</td> <td>675</td> <td>640</td> <td>542</td> </tr> </tbody> </table>	Type of material	2021	2022	2023	Iron	7,426	8,031	5,651	Stainless steel	1,755	1,711	1,378	Aluminium	229	148	195	Non-ferrous metal	94	80	77	Oils, fats, lubricants	21	16	10	Hazardous substances	675	640	542
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Aspect	Indicator	Description	Comment/reference																																																											
GRI 306 Waste (2016)	GRI 306-1	Waste generation and significant waste-related impacts	<p>See chapter “Products and services for a sustainable society” and “Environment and climate protection”.</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"> • Environmental policy (Zug site) <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"> • Hazardous goods checklist 																																																											
	GRI 306-2	Management of significant waste-related impacts	See chapter “Products and services for a sustainable society” and “Environment and climate protection”.																																																											
	GRI 306-3	Waste generated	<p>Waste by type (in tonnes):</p> <table border="1"> <thead> <tr> <th>Type of waste</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Waste wood</td> <td>688.4</td> <td>738</td> <td>396.7</td> </tr> <tr> <td>Bulky industrial/commercial items</td> <td>236.7</td> <td>230</td> <td>284.1</td> </tr> <tr> <td>Plastics</td> <td>45.3</td> <td>166</td> <td>183.1</td> </tr> <tr> <td>Scrap metal</td> <td>1,866.6</td> <td>1,892</td> <td>1,689.1</td> </tr> <tr> <td>Paper/cardboard</td> <td>528.9</td> <td>668</td> <td>648.1</td> </tr> <tr> <td>Oils, fats, lubricants</td> <td>14.0</td> <td>3.6</td> <td>2.4</td> </tr> <tr> <td>Special waste</td> <td>28.0</td> <td>19.6</td> <td>23.1</td> </tr> <tr> <td>Returned household appliances¹⁾</td> <td>1,304.8</td> <td>923.9</td> <td>1,167.6</td> </tr> <tr> <td>Other (old tyres, electrical waste, green waste)</td> <td>26.2</td> <td>24.3</td> <td>24.7</td> </tr> </tbody> </table> <p>¹⁾ 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 2023, 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.</p> <p>Waste by disposal type:</p> <table border="1"> <thead> <tr> <th>Type of disposal</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Recycled</td> <td>79.6 %</td> <td>78.6 %</td> <td>81.7 %</td> </tr> <tr> <td>Composted</td> <td>0.3 %</td> <td>0.2 %</td> <td>0.3 %</td> </tr> <tr> <td>Incinerated</td> <td>19.5 %</td> <td>20.7 %</td> <td>18.0 %</td> </tr> <tr> <td>Special waste</td> <td>0.6 %</td> <td>0.5 %</td> <td>0.6 %</td> </tr> </tbody> </table> <p>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.</p>	Type of waste	2021	2022	2023	Waste wood	688.4	738	396.7	Bulky industrial/commercial items	236.7	230	284.1	Plastics	45.3	166	183.1	Scrap metal	1,866.6	1,892	1,689.1	Paper/cardboard	528.9	668	648.1	Oils, fats, lubricants	14.0	3.6	2.4	Special waste	28.0	19.6	23.1	Returned household appliances ¹⁾	1,304.8	923.9	1,167.6	Other (old tyres, electrical waste, green waste)	26.2	24.3	24.7	Type of disposal	2021	2022	2023	Recycled	79.6 %	78.6 %	81.7 %	Composted	0.3 %	0.2 %	0.3 %	Incinerated	19.5 %	20.7 %	18.0 %	Special waste	0.6 %	0.5 %
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Special waste	0.6 %	0.5 %	0.6 %																																																											

Aspect	Indicator	Description	Comment/reference												
	GRI 306-4	Waste diverted from disposal	<p>Waste by disposal type in tonnes:</p> <table border="1"> <thead> <tr> <th>Type of disposal</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Recycled</td> <td>3,770.3</td> <td>3,666.8</td> <td>2,416.9</td> </tr> <tr> <td>Composted</td> <td>15.1</td> <td>11.0</td> <td>10.3</td> </tr> </tbody> </table> <p>Main recycling partner for returned appliances: Thommen Recycling, ISO 14001-certified</p> <p>We do not export any waste.</p>	Type of disposal	2021	2022	2023	Recycled	3,770.3	3,666.8	2,416.9	Composted	15.1	11.0	10.3
Type of disposal	2021	2022	2023												
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	GRI 306-5	Waste directed to disposal	<p>Waste by disposal type in tonnes</p> <table border="1"> <thead> <tr> <th>Type of disposal</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Incinerated</td> <td>925.2</td> <td>968</td> <td>680.8</td> </tr> <tr> <td>Special waste</td> <td>28.0</td> <td>19.6</td> <td>23.1</td> </tr> </tbody> </table> <p>We do not dispose of any waste in landfill sites.</p>	Type of disposal	2021	2022	2023	Incinerated	925.2	968	680.8	Special waste	28.0	19.6	23.1
Type of disposal	2021	2022	2023												
Incinerated	925.2	968	680.8												
Special waste	28.0	19.6	23.1												
Sustainable consumption and healthy nutrition															
GRI 3-3		Management of material topics	See chapter "Products and services for a future-fit society", "Entrepreneurship for sustainable prosperity" and overview "Material topics: Framing and impact".												
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 our 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). Our appliances meet the IEC 60335-1 standard (Safety of electrical appliances for household use). Furthermore, our 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, we describe what needs to be taken into account when installing our 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	No incidents.												

Aspect	Indicator	Description	Comment/reference
Healthy and committed employees			
Health and safety of employees			
GRI 3-3		Management of material topics	<p>See chapter “Healthy and committed employees” and overview “Material topics: Framing and impact”.</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 the ISO 45001 standard (Zug site). The organisation 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"> • ISO 45100 certificate (Zug site) • Policy on health and safety at work (Zug site) <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"> • Emergency response strategy • Safety patrol.AA • Procedure for determining hazards.AA

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, we make 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 border="1"> <thead> <tr> <th>Cause</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Illness</td> <td>109,410</td> <td>138,088</td> <td>104,813</td> </tr> <tr> <td>Occupational accident</td> <td>9,619</td> <td>6,922</td> <td>7,491</td> </tr> <tr> <td>Non-occupational accident</td> <td>13,837</td> <td>13,388</td> <td>13,590</td> </tr> <tr> <td>Total</td> <td>132,866</td> <td>158,398</td> <td>125,894</td> </tr> </tbody> </table> <p>See "Targets, facts and figures", in chapter "Healthy and committed employees".</p> <p>Occupational accidents by LTIR:</p> <table border="1"> <thead> <tr> <th></th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>LTIR</td> <td>14.6</td> <td>15.2</td> <td>13.2</td> </tr> </tbody> </table> <p>Occupational fatalities in the reporting year: 0</p> <p>See "Targets, facts and figures" in chapter "Healthy and committed employees".</p> <p>Figures for 2023 refer to the V-ZUG Group, while those for 2022 and 2021 refer to our production sites.</p>	Cause	2021	2022	2023	Illness	109,410	138,088	104,813	Occupational accident	9,619	6,922	7,491	Non-occupational accident	13,837	13,388	13,590	Total	132,866	158,398	125,894		2021	2022	2023	LTIR	14.6	15.2	13.2
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Development of potential and know-how management																															
GRI 3-3		Management of material topics	See chapter "Healthy and committed employees" and overview "Material topics: Framing and impact".																												

Aspect	Indicator	Description	Comment/reference																		
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 border="1"> <thead> <tr> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>258</td> <td>280</td> <td>298</td> </tr> </tbody> </table> <p>Rate of newly hired employees:</p> <table border="1"> <thead> <tr> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>14.7 %</td> <td>15.1 %</td> <td>14.1 %</td> </tr> </tbody> </table> <p>Staff turnover:</p> <table border="1"> <thead> <tr> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>12.5 %</td> <td>10.9 %</td> <td>14.4 %</td> </tr> </tbody> </table>	2021	2022	2023	258	280	298	2021	2022	2023	14.7 %	15.1 %	14.1 %	2021	2022	2023	12.5 %	10.9 %	14.4 %
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12.5 %	10.9 %	14.4 %																			
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-ZUG-connect", 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 "Healthy and committed employees".</p>																		
Diverse and inclusive working culture																					
GRI 3-3		Management of material topics	<p>See chapter "Healthy and committed employees" and overview "Material topics: Framing and impact".</p> <p>V-ZUG regularly conducts an equal pay analysis with the help of external experts.</p> <p>Examples of relevant internal documents: Working time regulations</p>																		

Aspect	Indicator	Description	Comment/reference																																																												
GRI 405 Diversity and equal opportunity (2016)	GRI 405-1	Percentage of people in governance bodies and among employees, by gender and age group	<p>Employees by gender and hierarchical level (including Board of Directors)</p> <table border="1"> <thead> <tr> <th>Gender</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Women on the Board of Directors</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> </tr> <tr> <td>Women on the Executive Committee</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> </tr> <tr> <td>Female managers</td> <td>107</td> <td>111¹⁾</td> <td>110¹⁾</td> </tr> <tr> <td>Male managers</td> <td>408</td> <td>432¹⁾</td> <td>437¹⁾</td> </tr> <tr> <td>Female employees</td> <td>273</td> <td>290</td> <td>385</td> </tr> <tr> <td>Male employees</td> <td>965</td> <td>1,006</td> <td>1,164</td> </tr> <tr> <td>Total women</td> <td>385</td> <td>406</td> <td>500</td> </tr> <tr> <td>Total men</td> <td>1,382</td> <td>1,447</td> <td>1,608</td> </tr> </tbody> </table> <p>¹⁾ 2022: changes to management categorisation/employees by age (excl. BoD)</p> <p>Employees by age (excl. Board of Directors):</p> <table border="1"> <thead> <tr> <th>Age group</th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Under 30</td> <td>308</td> <td>334</td> <td>354</td> </tr> <tr> <td>30–50</td> <td>907</td> <td>953</td> <td>1,091</td> </tr> <tr> <td>Over 50</td> <td>546</td> <td>560</td> <td>657</td> </tr> </tbody> </table> <p>See chapter "Healthy and committed employees" and chapter "Corporate Governance" for detailed information on members of the BoD and EC (including ages).</p> <p>Figures for 2023 refer to the V-ZUG Group, while those for 2022 and 2021 refer to our three production sites.</p>	Gender	2021	2022	2023	Women on the Board of Directors	3	3	3	Men on the Board of Directors	3	3	3	Women on the Executive Committee	2	2	2	Men on the Executive Committee	6	6	4	Female managers	107	111 ¹⁾	110 ¹⁾	Male managers	408	432 ¹⁾	437 ¹⁾	Female employees	273	290	385	Male employees	965	1,006	1,164	Total women	385	406	500	Total men	1,382	1,447	1,608	Age group	2021	2022	2023	Under 30	308	334	354	30–50	907	953	1,091	Over 50	546	560	657
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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 "Material topics: Framing and impact".</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"> • ISO 14001 certificate (Zug site) • Environmental policy (Zug site) <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"> • Hazardous substances storage • Dealing with hazardous substances
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Aspect	Indicator	Description	Comment/reference																												
GRI 302 Energy (2016)	GRI 302-1	Energy consumption within the organisation	<p>Absolute energy consumption in terajoules:</p> <table border="1"> <thead> <tr> <th></th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td></td> <td>114.6</td> <td>108.7</td> <td>107.7</td> </tr> </tbody> </table> <p>See "Targets, facts and figures" in chapter "Environment and climate protection".</p>		2021	2022	2023		114.6	108.7	107.7																				
		2021	2022	2023																											
	114.6	108.7	107.7																												
GRI 302-2	Energy intensity	See "Targets, facts and figures" in chapter "Environment and climate protection".																													
GRI 303 Water and effluents (2018)	GRI 303-3	Water withdrawal	<p>Water withdrawal by site in megalitres:</p> <table border="1"> <thead> <tr> <th></th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Zug</td> <td>29.3</td> <td>29.3</td> <td>31.7</td> </tr> <tr> <td>Arbon</td> <td>19.5</td> <td>2.3</td> <td>-</td> </tr> <tr> <td>Sulgen</td> <td>0.4</td> <td>1.2</td> <td>1.2</td> </tr> <tr> <td>Changzhou</td> <td>0.4</td> <td>0.4</td> <td>0.3</td> </tr> <tr> <td>Total</td> <td>49.6</td> <td>33.2</td> <td>33.2</td> </tr> </tbody> </table> <p>The water withdrawn is equivalent to the water fed back.</p>		2021	2022	2023	Zug	29.3	29.3	31.7	Arbon	19.5	2.3	-	Sulgen	0.4	1.2	1.2	Changzhou	0.4	0.4	0.3	Total	49.6	33.2	33.2				
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Logistics and mobility																															
GRI 3-3		Management of material topics	<p>See chapter "Environmental and climate protection" and overview "Key topics: Framing and impact".</p> <p>The CO₂ 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"> Direct emissions of greenhouse gases from sources that are owned or controlled by V-ZUG. <p>Emissions in tonnes of CO₂ equivalents (Scope 1):</p> <table border="1"> <thead> <tr> <th></th> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>Petrol</td> <td>2</td> <td>2</td> <td>0</td> </tr> <tr> <td>Diesel</td> <td>1,770</td> <td>1,711</td> <td>1,706</td> </tr> <tr> <td>Heating oil</td> <td>560</td> <td>29</td> <td>71</td> </tr> <tr> <td>Natural gas</td> <td>1,763</td> <td>1,668</td> <td>503</td> </tr> <tr> <td>Propane</td> <td>0</td> <td>53</td> <td>1,265</td> </tr> <tr> <td>Total Scope 1</td> <td>4,096</td> <td>3,464</td> <td>3,545</td> </tr> </tbody> </table> <p>See "Goals, facts and figures" and the explanation of the scopes for CO₂ neutrality in the chapter "Environment and climate protection".</p>		2021	2022	2023	Petrol	2	2	0	Diesel	1,770	1,711	1,706	Heating oil	560	29	71	Natural gas	1,763	1,668	503	Propane	0	53	1,265	Total Scope 1	4,096	3,464	3,545
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Total Scope 1	4,096	3,464	3,545																												

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"> • Indirect greenhouse gas emissions resulting from the generation of purchased electricity and district heat at the headquarters in Zug (V-ZUG AG) and the sites at Sulgen (V-ZUG K�hltechnik AG) and Changzhou (V-ZUG (Changzhou) Special Components Co., Ltd.). This corresponds to the reported electricity consumption and energy sourced from district heating. • The district heat produced by the MEH at the Zug site generates essentially no emissions, other than peak gas that is occasionally used. • Low-emission Swiss hydroelectric power is used at Zug and Sulgen. <p>Emissions in tonnes of CO₂ equivalents (Scope 2, market-based):</p> <table border="1"> <thead> <tr> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>244</td> <td>225</td> <td>145</td> </tr> </tbody> </table> <p>Emissions in tonnes of CO₂ equivalents (Scope 2, location-based):</p> <table border="1"> <thead> <tr> <th>2021</th> <th>2022</th> <th>2023</th> </tr> </thead> <tbody> <tr> <td>1,754</td> <td>1,837</td> <td>1,585</td> </tr> </tbody> </table> <p>See "Targets, facts and figures" and the explanation of the Scopes for CO₂ neutrality in the chapter "Environment and climate protection".</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 2023) in order to support the expansion of renewable energy. The CO₂ 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. 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	244	225	145	2021	2022	2023	1,754	1,837	1,585
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GRI 3-3		Management of material topics	<p>See chapter "Entrepreneurship for sustainable prosperity" and overview "Material topics: Framing and impact".</p> <p>Published documents (accessible via website):</p> <ul style="list-style-type: none"> • Environmental policy (Zug site) • Code of Conduct for Suppliers <p>Examples of relevant internal documents:</p> <ul style="list-style-type: none"> • V-ZUG Group Code of Conduct • Supplier audit questionnaire • Supplier contract 																																																								

Aspect	Indicator	Description	Comment/reference
GRI 204 Procurement practices (2016)	GRI 204-1	Proportion of spending on local suppliers	Around 60 % of our suppliers are based in Switzerland, and another 30 % or so are located in nearby European countries. We obtain most of our electronics components from highly specialised markets in Asia.
GRI 308 Supplier environmental assessment (2016)	GRI 308-2	Number of suppliers assessed for environmental impact	See "Targets, facts and figures" in chapter "Entrepreneurship for sustainable prosperity".
GRI 414 Supplier social assessment (2016)	GRI 414-2	Number of suppliers assessed for social impact	See "Targets, facts and figures" in chapter "Entrepreneurship for sustainable prosperity".
Long-term corporate success as added value for society			
GRI 3-3		Management of material topics	See chapters "Company profile", "Entrepreneurship for sustainable prosperity" and "Material topics: Framing and impact".
GRI 201 Economic performance (2016)	GRI 201-1	Direct economic value generated and distributed	See "Financial Report", 2023 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 K�hltechnik AG in Sulgen. See chapters "Environment and climate protection", "Entrepreneurship for sustainable prosperity" and the "Real Estate" segment report, 2023 Annual Report.
Business ethics and compliance			
GRI 3-3		Management of material topics	See chapters "Entrepreneurship for sustainable prosperity" and "Material topics: Framing and impact". For embedding policy commitments, see "GRI 2-23" and "GRI 2-24".
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.

Climate Report (TCFD)

Introduction

For the 2023 financial year, V-ZUG is reporting in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for the first time. 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. Our 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. Our 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 CO₂ 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 our climate targets.

Our Sustainability Report is drawn up by an interdisciplinary working group, led by the Head of Sustainability at V-ZUG. The CO₂ 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.

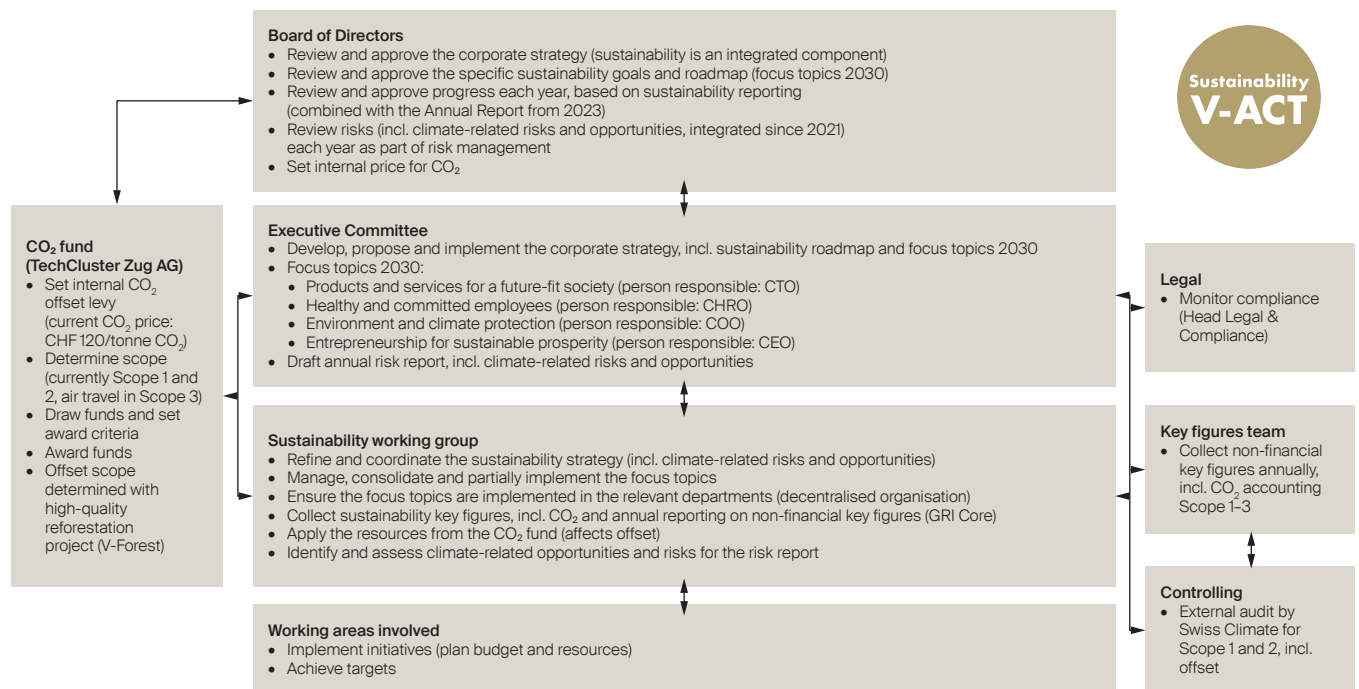
From the 2023 financial year onwards, we are integrating the Sustainability Report into the Annual Report. This not only strengthens the involvement of the entire Board, but also demonstrates the equal importance of financial and non-financial key figures. The Audit Committee of the Board of Directors 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 our 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 CO₂) and annual reporting on non-financial key figures (in accordance with the GRI Standards) are important tools for handling and reviewing sustainability topics. Our materiality matrix is updated every three to four years (most recently in 2021).

As part of our TCFD reporting activities, the risk-analysis process used to compile our annual risk report has been expanded to include more detailed climate-related risks and opportunities. The Sustainability Workforce undertakes this more in-depth, multi-faceted 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 greenwashing), 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 ("Shared Economy", "Product as a Service", etc.).

1. Climate-related physical risks:

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

2. Climate-related transition risks:

3. V-ZUG is perceived as a brand that does not take responsibility for climate protection and shows no accountability.
4. In terms of communication, our approach to climate protection is exaggerated and perceived as greenwashing.
5. 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.
6. More stringent regulations are issued regarding ecodesign (energy efficiency, the circular economy, material impact, etc.).
7. A CO₂ levy is introduced/extended for companies (already in place in Switzerland for heating oil and gas).
8. Increased climate awareness and higher consumption costs lead to a change in consumer behaviour.

"Environment and climate protection" focus topic – CO₂ 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, offset – important tool: internal CO₂ levy

To minimise the effect our business activities have on the environment (inside-out), we adhere to the principle of "preventing, reducing and offsetting CO₂ 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 CO₂ 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 CO₂ is applied to the remaining Scope 1 and 2 emissions as well as Scope 3 emissions from air travel and paid into our CO₂ 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 CO₂ emissions along the entire value chain. Our aim is to reduce direct emissions largely through our own efforts. As such, we have set targets to be achieved by 2030 – and identified and planned the measures needed to reach these targets. We have also been investing in a high-level climate protection project since 2020 to offset our remaining emissions (Scope 1 and 2 as well as air travel in Scope 3). This means that V-ZUG has achieved and maintained CO₂-neutral production (including offsetting) for all Swiss-made appliances since 2020. The money required to offset our emissions is also taken from the CO₂ 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 CO₂ 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 CO₂. The project is protected against forest fires, diseases and other risks. 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 CO₂, 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 CO₂ 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 CO₂. Until then, the Ripa Gar Foundation is supporting another reforestation project in India that captures an equivalent amount of CO₂ for each tonne of CO₂ 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 CO₂ 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 CO₂-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 as well as 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 %. V-ZUG thus intends to achieve a significantly greater reduction in CO₂ emissions than the recommendations of the Science Based Target initiative (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 (MEH)** 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 CO₂ 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 will see the introduction of our first electric trucks (15 vehicles in total). The conversion of the truck fleet is being partially financed by our CO₂ 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 CO₂ 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 CO₂ 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 CO₂ emissions, production at V-ZUG has been CO₂-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 to our operations. 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 somewhere between a “1.5°C” target (– 42 %) and a “well below 2°C” target (– 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 new 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 **CO₂ Webshop**, our customers can offset the emissions that result from using their appliances. These contributions are put towards the “V-Forest” reforestation project.

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” and “Hot House World” scenarios and assessed the separate risks identified in each scenario.

- 1 The **“Orderly” 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 world” 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>Risk 1: Extreme weather conditions (droughts, heavy rain, floods) and chronic changes to weather patterns (higher global temperatures, rising sea levels) could have a negative impact on our supply chain.</p> <p>Risk: Climate change causes an increase in the average global temperature, which may result in extreme (localised) weather events, such as droughts, heat waves, heavy rain, floods and rising sea levels.</p> <p>Certain essential components 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 regular disruptions in deliveries and a lack of components (or drive up the prices of components), which would have a negative impact on production and net sales.</p> <p>Opportunity: 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>Opportunity: 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>Opportunity: 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>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> • Rethink our supply chain or make it more resilient: <ul style="list-style-type: none"> • Greater focus on production in Switzerland • Shortening of our supply chain • 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) • Make an active contribution to limiting global warming to 1.5°C (as per Paris Agreement) by doing the following: <ul style="list-style-type: none"> • Implementing our sustainability targets and ensuring regular reviews and adjustments • Reducing our Scope 1 and 2 emissions by 80% by 2030 and reducing Scope 3 emissions by 30% by 2030 • Promoting and supporting the expansion of the circular economy (taking back appliances, reusing components, etc.) will help make us more resilient to changes in the supply chain. 	<p>1.5°C–2°C scenario: Before/without measures: 12 After measures: 4</p> <p>3°C scenario: Before/without measures: 64 After measures: 8</p>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<p>Risk 2: Extreme weather conditions (<u>severe</u> heat and/or other weather events) could have a negative impact on employees' health and productivity levels.</p>	<p>Risk: If employees are less productive due to prolonged periods of heat (or other extreme weather events) or are absent more often for health reasons, this could potentially reduce our profitability (presenteeism, stress).</p> <p>V-ZUG will also have to reckon with increased adaptation costs (e.g. cooling systems, costs for absences due to illness) and higher insurance costs for assets and staff, which may drive up production costs in general.</p> <p>Opportunity: As a company that is committed to sustainability and future-focused transformation, V-ZUG could become increasingly attractive as an employer for potential employees.</p>	<p>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> • Focus topic: Healthy and committed employees with clearly defined sub-targets, particularly: <ul style="list-style-type: none"> • Focusing on the long-term health of our employees (target: stabilise the absence rate by 2025 and lower it over the long term) • Occupational safety (goal: vision "zero" and 5% annual reduction in the number of accidents) • Site transformation at our headquarters in Zug and the new refrigerator factory building in Sulgen: new buildings with cooling systems have a positive impact on employee health and productivity levels. 	<p>1.5°C–2°C scenario: Before/without measures: 24 After measures: 6</p> <p>3°C scenario: Before/without measures: 64 After measures: 25</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			
<p>Risk 3: V-ZUG is perceived as a brand that does not take responsibility for climate protection and shows no accountability.</p>	<p>Risk: 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.</p> <p>Opportunity: 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.</p>	<p>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> • Greater emphasis on external communication regarding climate protection measures already implemented or planned • Particular focus on the key role that sustainability plays in our corporate strategy and production and development processes • Communicate our sustainability targets, reduction targets, Scope 1, 2 and 3 (approach: prevent, reduce, offset) • Streamline and consolidate the process for documenting all V-ZUG's efforts in the area of corporate sustainability to make transparent external communication easier • Gradually expand our sustainability communications to previously unused channels (e.g. social media, intranet, apps, employee onboarding, operating instructions, website) • Regularly review the information being communicated to ensure it is consistent and up to date with the sustainability measures actually implemented/ planned 	<p>1.5°C–2°C scenario: Before/without measures: 25 After measures: 4</p> <p>3°C scenario: Before/without measures: 49 After measures: 6</p>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<p>Risk 4: Our approach to communication on climate protection measures is exaggerated and perceived as greenwashing.</p>	<p>Risk: 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.</p> <p>Opportunity: By continuing to implement its current and planned sustainability measures, V-ZUG can enhance its reputation and differentiate itself from its competitors.</p>	<p>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> • Transparent, serious and truthful communication regarding our projects and successes (avoid exaggeration; transparency leads to comparability among companies and increases trust) • Transparency through annual reporting on Scope 1, 2 and 3 emissions in our Sustainability Report in accordance with global standards (GRI, GHGP) • Orientation towards and alignment with relevant recommendations and requirements (e.g. SBTi, CDP) • Monitoring the regulatory environment (e.g. EU Green Claim Directive) • External validation of Scope 1 and 2 emissions and offsetting measures to achieve CO₂-neutral status at our production sites through Swiss Climate • Prioritising clear, truthful presentation and communication of the climate protection measures that V-ZUG is currently implementing and intends to implement in the future • Clear presentation and explanation of the approach taken and the significance of the targets/measures (e.g. offsetting with "V-Forest") 	<p>1.5°C–2°C scenario: Before/without measures: 63 After measures: 4</p> <p>3°C scenario: Before/without measures: 80 After measures: 9</p>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
	<p>Risk 5: 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 measures not proving to be technically feasible.</p> <p>Risk: 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>Opportunity: 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>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> • 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 towards: <ul style="list-style-type: none"> • Reducing our Scope 1 and 2 emissions by 80 % by 2030 • Reducing Scope 3 emissions by 30 % by 2030 • Our voluntary, internal CO₂ fund enables us to make eco-friendly investments (e.g. e-trucks to reduce our CO₂ emissions). • 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. • Prioritising the clear, truthful representation and communication of climate protection measures. 	<p>1.5°C–2°C scenario: Before/without measures: 30 After measures: 2</p> <p>3°C scenario: Before/without measures: 42 After measures: 6</p>
Regulatory/statutory			
	<p>Risk 6: More stringent regulations are issued regarding ecodesign (energy efficiency, the circular economy, material impact).</p> <p>Risk: 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>Opportunity: 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>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> • Conduct regular reviews to assess which new/more stringent ecodesign guidelines are likely to be issued in the near future and affect us. • The focus must always be on developing sustainable products, regardless of any new regulations entering into force: <ul style="list-style-type: none"> • Pursuing a systematic investment strategy that enables future-fit innovations and efficiency gains • Using innovations and targeted guiding principles (energy efficiency, circular economy principles in product development, etc.) • 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. 	<p>1.5°C–2°C scenario: Before/without measures: 54 After measures: 36</p> <p>3°C scenario: Before/without measures: 72 After measures: 54</p>

Type	Risks and opportunities (impact on V-ZUG)	Measures	Risk factors Scenario analysis
<p>Risk 7: A CO₂ levy for companies is introduced/expanded (already in place in Switzerland for heating oil and gas, potential extension).</p>	<p>Risk: 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.</p> <p>Opportunity: V-ZUG could be seen as something of a pioneer (voluntary internal CO₂ levy introduced in 2018), which has a positive impact on the company's reputation and generates additional business.</p>	<p>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> Monitoring upcoming ESG regulations and requirements on an ongoing basis Adjusting our corporate strategy accordingly Voluntary internal CO₂ levy introduced in 2018 (Scope 1 and 2 plus air travel) (rate: CHF 120/tCO₂). As such, part of the potential tax is already reflected in our budget and financial planning measures. 	<p>1.5°C–2°C scenario: Before/without measures: 42 After measures: 28</p> <p>3°C scenario: Before/without measures: 64 After measures: 48</p>
Market:			
<p>Risk 8: Increased climate awareness and higher consumption costs lead to a change in consumer behaviour.</p>	<p>Risk: 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).</p> <p>Opportunity: 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.</p> <p>Opportunity: If energy prices increase, household appliances with sustainable features will likely have a (competitive) advantage over less energy-efficient models.</p>	<p>Minimising risk and exploiting opportunities:</p> <ul style="list-style-type: none"> 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. Early promotion and further development of new business models such as “Shared Economy”, “Product as a Service” and “Second Life”. By pursuing a systematic investment strategy, we can ensure future-fit innovations and efficiency gains. 	<p>1.5°C–2°C scenario: Before/without measures: 16 After measures: 4</p> <p>3°C scenario: Before/without measures: 35 After measures: 10</p>

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°C–2°C scenario for the transition risks of greenwashing, more stringent ecodesign guidelines and the extension 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°C–2°C scenario, we believe 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 would expect the measures we have outlined to 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 CO₂ 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 (p. 49). Details can also be found in the appendix (p. 184) and the GRI index (p. 144).

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 with the specified characteristics that would be subject to reporting requirements under the DDTrO. This is reviewed by our Procurement department on an annual basis using the tariff numbers for the specific materials, which are listed in Annex 1 to the DDTrO.

We are therefore not subject to any due diligence or reporting obligations in this regard in accordance with the CO.

Our suppliers are also required to disclose any relevant information on this topic to us using our Code of Conduct for Suppliers and 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"). In total, 83 % of our materials/modules come from countries with only a low level of risk exposure to child labour ("Basic"). The remaining 17 % come from countries where there is an increased risk of child labour ("Enhanced"). This information is reviewed and updated on an annual basis.

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	2023 results	Status	Metrics
Efficiency				
One appliance per product category in top 3 for efficiency (comparison site TopTen.ch)	Annual review	Washing machines: Energy: 1 /Water: 7 Tumble dryers: Energy: 1 Ovens: Energy: 2 Steamers: Energy: 1 Dishwashers: Energy: 1 /Water: 1 Fridge freezers: Energy: 2 Fridges with freezer compartment: not ranked Range hoods/island: Energy: 3 Range hoods/downdraft: not ranked Range hoods/flat: Energy: 4 In top 3 in 8 out of a total of 12 categories – 67% attainment	Not achieved	Ranking from comparison site TopTen.ch – in November 2023
Increase fleet efficiency of all appliances (energy and water) by 5%	2021; 2030	Newly introduced appliances (washing machines) and a shift in the mix of steamers lead to greater energy efficiency. Slight regression in water efficiency due to shift of product mix towards shared washing machines for apartment buildings. More “Shared Economy” is positive for the environment but has a negative impact on fleet efficiency. Fleet efficiency/energy 2021: 231 kWh/year 2022: 229 kWh/year 2023: 219 kWh/year (5.2% increase in efficiency vs baseline year) Fleet efficiency/water 2021: 6,830 l/year 2022: 6,477 l/year 2023: 6,836 l/year (No change in efficiency vs baseline year) Based on projections and planned innovations, the target was revised upwards to an increase of 10%.	On track	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 The indicator is a calculated average of V-ZUG appliances across all product categories.
All our current network-enabled appliances have extensive integrated eco-functions/services	n.a.; 2025	Current functions in 2023 (selection, not exhaustive): <ul style="list-style-type: none"> • EcoManagement: usage data displayed, predicted and actual values (multiple categories) – now also with list view in the V-ZUG-Home app • OptiDos washing machines: optimised, economical detergent dosage • OptiTime: if speed is not important. Long running time with maximum energy and water efficiency. • SmartStart: Use of self-generated solar power • Wide-ranging electricity saving campaign run via V-ZUG-Home app Eco-functions available – upgradable, with focus on digital technology	On track	Cannot be quantified – will continue to be stated qualitatively for time being

Targets	Baseline and target years	2023 results	Status	Metrics
Circularity				
Life cycle assessments for all appliances (one reference model per category)	n.a.; 2023	Method established at company, additional resources created in Development (Sustainability Expert Engineering) 11 of 11 categories done 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	Achieved (since 2023)	No. of appliances (reference model) per category Total categories: 11 (steamers, ovens, drawers, microwaves, CoffeeCenters, hobs, range hoods, dishwashers, refrigerators, washing machines, tumble dryers)
Achieve 90% recyclability of appliances	Development projects; 2025	No project completed yet Method worked out in theory and validated with recycling companies (washing machines and refrigerators) Status quo across all categories with LCA recording carried out in 2023. Recycling rate between 77% (hob) and 97% (refrigerator). Background: The recycling rate depends on the method of recycling used. The more circular economy principles we introduce, the higher the rate will be. First major project using the method Implemented in product requirements and development process for all projects	On track	Recycling and reuse rate per product (anchor product)
Reduce ecopoints (EPs) by 5%	Development projects; 2030	Refrigerator project completed: The new model has a larger footprint in terms of materials (consideration: assembled, especially insulation), but this reduces energy consumption substantially during use and achieves the target (consideration: end-of-life, EoL). EP EoL reduced by 17%. Further major project using the method; initial projection at milestone 30 (completion of concept phase) is promising. Implemented in product requirements and development process for all projects.	On track	When developing new products compared with predecessor model
All appliances developed according to circular design principles	Development projects; 2030	No project completed yet Core element: design-to-circularity principles Method worked out and introduced, being applied in first major project. Included in milestone analysis. Implemented in product requirements and development process for all projects	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: Healthy and committed employees

Targets	Baseline and target years	2023 results	Status	Metrics
Occupational safety: vision "zero" and 5% annual reduction in the number of accidents	Annually	<p>Workplace accidents 2021: 89 Workplace accidents 2022: 88 Workplace accidents 2023: 75</p> <p>13 fewer workplace accident than 2022 – 15% reduction. Accidents were also recorded on a global basis for the first time in the reporting year and can only be compared with the previous years to a limited degree.</p> <p>The various campaigns are having an effect (2021: Tripping & Falling, 2022: Cuts and Bruises, 2023: Lifting & Carrying). Monthly occupational safety training also held for all new employees. Be Aware Month with focus on occupational safety in January 2023 and introduction of occupational safety contacts (KoPAS).</p>	Achieved	No. of occupational accidents (both minor and significant accidents)
Long-term health: we will stabilise the absence rate by 2025 and lower it long-term	2020; 2025	<p>Absence rate 2021: 3.80 % Absence rate 2022: 4.42 % Absence rate 2023: 4.02 %</p> <p>Absence rate reduced by 0.4 percentage points in 2023. Down almost 4 percentage points during the reporting year; at 80 %, illness was the most frequent cause for absence. The number of occupational accidents fell, while the number of hours lost as a result increased.</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>	On track	Absence rate, in % of contracted hours
Investment in education & training: 0.65 % of payroll spend	Annually	<p>Investment 2021: 0.67 % (CHF 899,000) Investment 2022: 0.67 % (CHF 925,000) Investment 2023: 0.62 % (CHF 857,000)</p> <p>V-ZUGacademy offering: Internal and external training courses on a wide variety of subjects</p>	Not 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	2023 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) 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 89 apprenticeships in 11 skilled trades	Achieved	Investment as % of AHV insured salary total
Diversity: we will increase the proportion of women across the Group as follows: 1) in leadership team, incl. Board, to >25% 2) same proportion in management team as across the entire company (see 3) 3) and proportion of women generally across the entire company	n.a.; 2025 (new 2030)	1) Leadership team: 2021: 23.6% / 2022: 20.0% / 2023: 20.8% 2) Management team: 2021: 20.8% / 2022: 22.4% / 2023: 20.6% 3) Proportion of women generally: 2021: 23.2% / 2022: 24.4% / 2023: 23.6% 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 The definition of senior management levels – lead- ership team and management team – was revised, expanded and rolled out across the Group during 2022. As a result, the figures since 2022 are not directly comparable with those from previous years. Despite our considerable efforts, it is proving a challenge to increase the proportion of women at the company in the short term. We have therefore decided to maintain the level of ambition behind our targets, but to change the target year to 2030.	1) Delayed 2) Delayed 3) Delayed	HR metrics
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 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	2023 results	Status	Metrics
CO₂ emissions				
To be carbon-neutral at all production sites within Scope 1 and 2 (incl. offsetting)	Annually	The remaining emissions in the 2023 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 TCFD Report.	Achieved (since 2020)	Scope 1 and 2 emissions as per Greenhouse Gas Protocol (market-based)
To reduce the remaining Scope 1 & 2 emissions by 80 % (long-term ambition: 100 %)	2020; 2030	2021: 4,340 tCO ₂ 2022: 3,689 tCO ₂ 2023: 3,690 tCO ₂ Transformation delayed; emissions remain unchanged at 0.02%; On track cumulatively for the base year 2020 (- 17.1%) Market-based figures; for details, see GRI index. With the heat pump in our new refrigerator factory building in Sulgen, we have completely eliminated emissions caused by heating oil at the old site (Arbon). The expansion of our Multi Energy Hub (MEH) at our Zug site to other buildings was delayed in 2023 due to construction issues. As a result, temporary measures were put into operation using heating oil, with propane used to power boilers. The significant effect of the MEH on the reduction of natural gas and propane will only materialise in 2024.	On track	Scope 1 and 2 emissions as per Greenhouse Gas Protocol
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 GRI index. 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	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 Scope 3 emissions 2021: 432,057 tCO ₂ (- 6.1% based on 2020) 2022: 417,617 tCO ₂ (- 9.21% based on 2020) 2023: 338,078 tCO ₂ (- 26.5% based on 2020) The main reason for the absolute reduction is the decrease in the number of units in the reporting year, resulting in less material and electricity consumption. In addition, there was a 5% increase in fleet efficiency in electricity consumption. In relative terms (emissions per appliance sold), the reduction compared to the baseline is also a gratifying - 16.1%.	On track	Scope 3 emissions as per Greenhouse Gas Protocol, annual survey of main categories (11 out of 15)

Targets	Baseline and target years	2023 results	Status	Metrics
		We have already been reducing indirect emissions for years through constant increases in the energy efficiency of our products, a mobility strategy at our Zug headquarters, our geographical proximity to suppliers, the use of wood as a construction material for buildings, the professional disposal of waste, and the extensive return and recycling of household appliances at the end of their life cycle.		
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	Survey of waste and disposal methods: 2023: recycling: 81.7%/composting: 0.3%/incineration: 18.0%/special waste: 0.6%/landfill: 0% (see GRI index for details) Focus in 2023: packaging and paper Reduction projects achieved by digitising payslips, order forms, invoices, logistics, spare parts inventory, production orders, etc.	On track	Waste amount in tonnes and by waste type
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	Although the environmental measures we had planned for 2023 were implemented, net sales were lower than expected due to the challenging market environment. As such, only a slight increase in ecological efficiency was achieved in 2023. However, we are on track overall. 2021: environmental footprint: 19,639 million EPs Net sales: CHF 631.3 million Increase in ecological efficiency: 7% 2022: environmental footprint: 16,902 million EPs Net sales: CHF 636.3 million Increase in ecological efficiency: 14% 2023: environmental footprint: 15,134 million EPs Net sales: CHF 585.4 million Increase in ecological efficiency: 2% Cumulative since 2020: increase in ecological efficiency of 23%	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

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	2023 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% 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% 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 purchasing 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 73% of our purchasing volume by the end 2023. 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"> • Washing machine plinth (plastic) • Washing machine drawer (plastic) • Interior of dishwasher and “CombiSteamer” (stainless steel) Internal transparency established. External communication in the pipeline. Additional elements to follow in 2024.	On track	Core element per product category

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

