



ZugEstates

2022

Sustainability Report

in accordance with the GRI Standards, 25 August 2023

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Introduction

With our buildings and properties we shape the way people live for generations to come. We focus not only on new transformation projects such as the living space at Metalli, but also maintain existing areas and properties. In recent months, we have also taken many measures to improve the quality of the shared and exterior areas of the Suurstoffi site in Rotkreuz. This includes redesigning the spaces and promoting biodiversity through the creation of natural patches and construction of stone and deadwood piles.

Dialogue with local residents indicated a strong interest in ecological and social issues concerning the Metalli living space project. While solutions to key environmental issues such as biodiversity, lower greenhouse gas emissions, and a circular economy are increasingly gaining attention, the interpretation of the topic of social sustainability remains vague. Zug Estates intends to increasingly address these aspects (mix of uses, quality of stay, social mix) with a view to creating sustainable and diverse living spaces for members of society today and tomorrow.

The core of our sustainability strategy remains the reduction of greenhouse gas emissions. Despite the acquisition of the Renggli portfolio as of 1 October 2022 that still relies largely on fossil energy sources, greenhouse gas emissions of 0.9 kg per m² of energy reference area (Scopes 1 and 2) are at the previous year's level and thus still well below the industry average. The acquisition-related increase was compensated by savings in the city centre site/Metalli, where the last properties (except the Bären restaurant), Haldenstrasse 9-16 and the City Garden Hotel, were connected to the Circulago lake-water energy district.



The discussion around grey energy and the aspects of the circular economy in the construction of buildings is gaining in importance. Zug Estates is pursuing ambitious goals in this area and wants to promote a dialogue in the industry. To this end, we signed the "Reuse-Oriented Construction Charter" with eleven other large companies and organisations in June 2023.

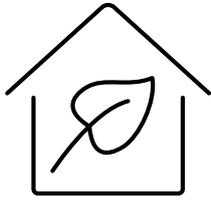
The complete report in accordance with GRI Standards as well as exciting articles can be found at zug-estates.ch. I wish you a rewarding read.

Zug, August 2023

A handwritten signature in black ink, appearing to be 'Patrik Stillhart', written over a thin horizontal line.

Patrik Stillhart
CEO

Key figures



0.9 kg

Greenhouse gas emissions in kilogram per m² of energy reference area

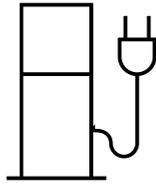
365

Number of customers in the private consumption community



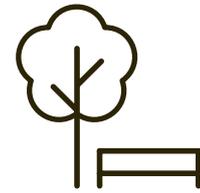
78

E-vehicle charging stations



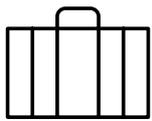
30

Buildings with solar installations (56% of all buildings)



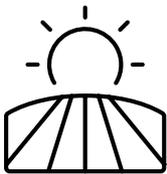
57%

Percentage of certified outdoor spaces



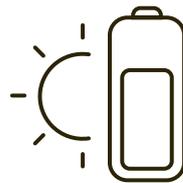
200 million

Volume of green bonds placed



65 kWh

Energy intensity per m² of energy reference area



1234 MWh

Solar power production (sufficient for 275 single-family homes)

630 litres

Water consumption per m² of lettable area



164



Number of employees working for the Zug Estates Group

Reading material



"How to succeed with concentration?"

Today's cities are changing. Success comes to those who involve members of society in the processes and who can show them tangibly the added value of new buildings.

 Interview with Kai-Uwe Bergmann, partner at BIG (Bjarke Ingels Group, Copenhagen/ New York)

Strengthening the exterior space concept

Various measures have been implemented at the Suurstoffi site to further improve the quality of its shared and exterior areas.

To the article



Grey energy – invisible but significant

Grey energy is needed for extracting raw materials and for producing, transporting and packaging products. Zug Estates aims to lower the amount of grey energy.



To the article

Ambitious energy project

Zug Estates has completed an ambitious energy project at Haldenhof in the centre of Zug. It relies on a private consumption community to connect self-produced solar power with e-mobility, including car-sharing offers and bidirectional charging.

To the article & explanatory video



Sustainable journey

We add value by creating, managing and continuously developing sustainable and diverse living environments.



January 2010

Grand opening of City Garden Hotel:
Zug Estates' first wooden building



July 2018

First wooden high-rise in Switzerland

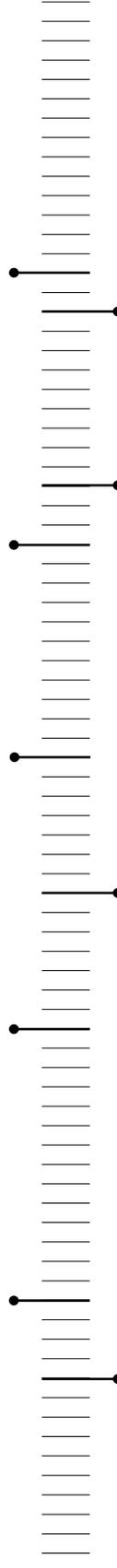


November 2019

Aglaya garden high-rise completed

April 2020

Metalli complex connected to the Circulago lake-water district



June 2010

Foundation stone ceremony for the CO₂-free Suurstoffi site

Januar 2015

Fertigstellung grösste Holzbau-siedlung der Zentralschweiz

September 2019

Private consumption community launched at the Suurstoffi site

First green bond placed by a Swiss real estate company

Grand opening of the tallest wooden high-rise in Switzerland

June 2020

Metalli Shopping Centre: first high-power, rapid e-vehicle charging stations in the city of Zug



January 2022

Second green bond placed

2021

Nine more buildings connected to Circulago



June 2022

Connection of the remaining properties to Circulago

June 2023

Co-signing of the Reuse-Oriented Construction Charter



October 2022

Haldenhof energy project: Convergence of private consumption community (PCC), solar power, and e-mobility (incl. car sharing and car as battery storage)



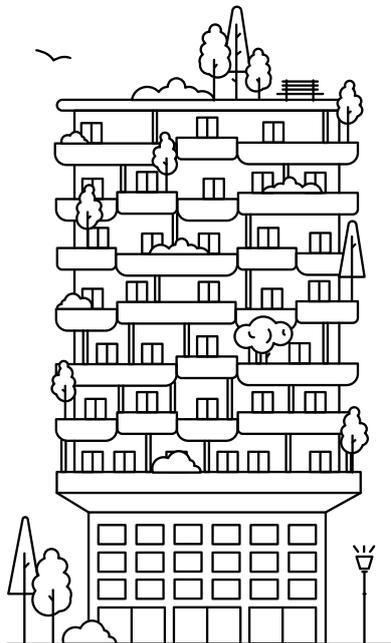
August 2023

Opening of the e-mobility hub in the Metalli shopping centre



August 2023

Opening of the e-mobility hub in the Metalli shopping centre



1. Sustainability strategy

1.1 Sustainable business model and value chain

Zug Estates Group adds value by building, managing, and continuously developing future-oriented and diverse living spaces. It focuses on central sites in the Zug region that are suitable for a wide range of uses and allow for sustainable development. Its business activities are in the real estate and hospitality GRI sectors. The real estate portfolio primarily has two sites in Zug and in Risch-Rotkreuz (both in the Canton of Zug, Switzerland) and is broadly diversified in terms of type of use. The wide mix of uses is part of the Group's business strategy and at the end of 2022 comprised residential (26%), office (26%), retail (16%), parking (7%), hotel & catering (9%), education, leisure and culture (7%) and other (9%). Together, the two sites offer living space for around 2,200 people plus more than 4,000 jobs. As at 31 December 2022, the total value of the portfolio was CHF 1.83 billion, and the Group had 138 full-time positions filled. The reporting period had no significant changes in the organisation and supply chain.

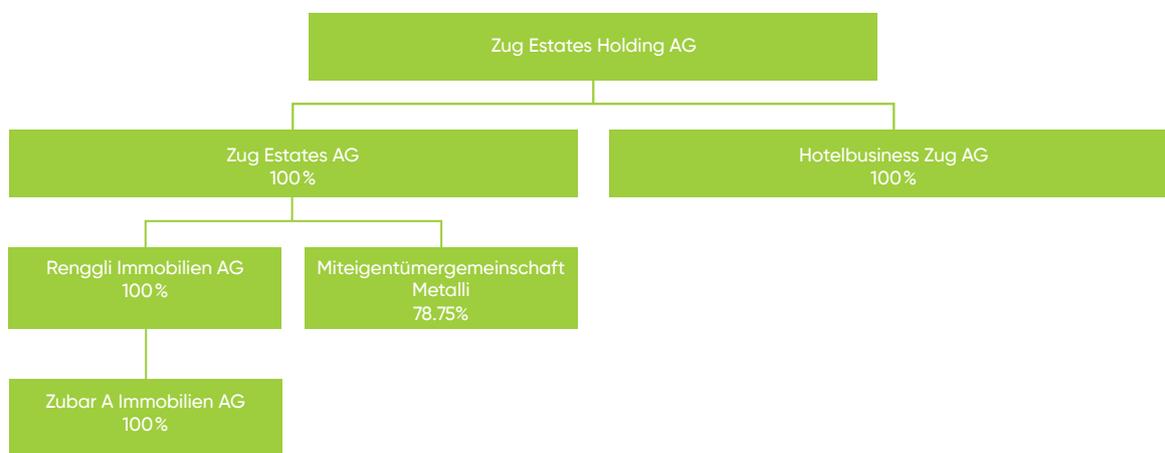
Via its subsidiary Hotelbusiness Zug AG, the Zug Estates Group operates a city resort in Zug comprising two leading business hotels, Parkhotel Zug and City Garden, as well as serviced city apartments. This offer is geared to corporate clients and has a capacity of around 250 units, plus catering services.

The sites are being developed in line with the sustainable principles described in detail in this report. A key outcome of our sustainability strategy to date has been the nearly CO₂-free operation of the Suurstoffi site and the city centre site/Metalli. Furthermore, when designing the outdoor spaces, Zug Estates strongly emphasises high-quality and varied green spaces that offer people a place to relax and that convey a sense of well-being. The Metalli living space is also envisioned to become a popular place for Zug residents to meet and use even after shops close and on weekends. This approach will enable Zug Estates to create long-term added value that benefits society, the environment and our stakeholder groups.

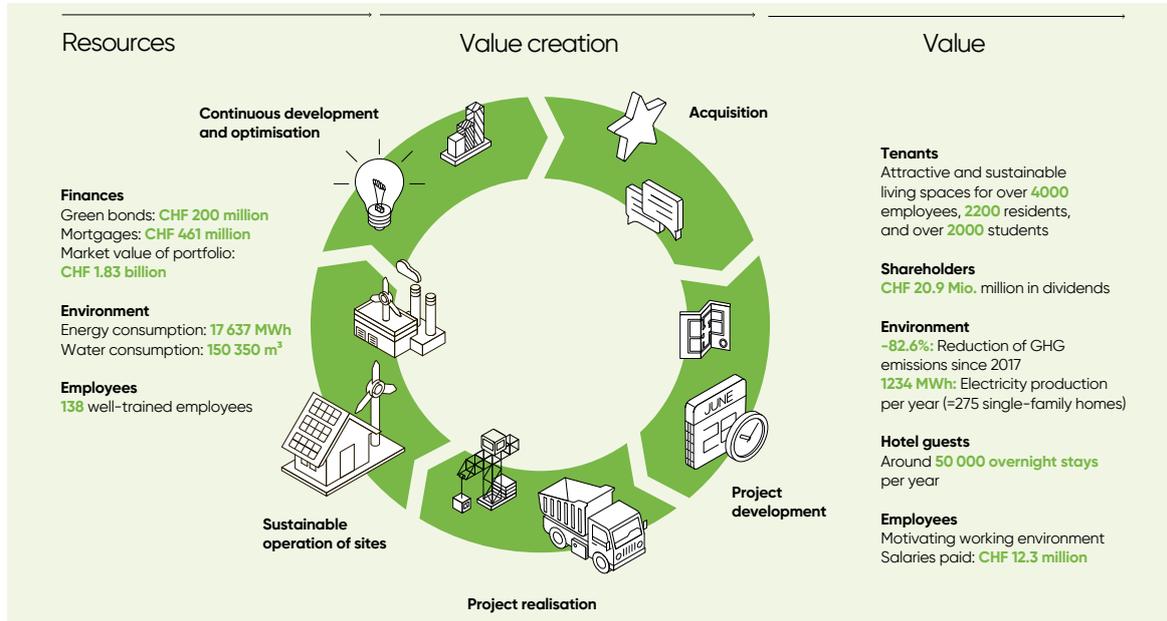
With the adoption of the new Articles of Association in April 2023, we have additionally defined sustainability as an essential corporate purpose. At the same time, sustainable aspects remain part of our value chain and investment criteria.¹

¹ <https://zugestates.ch/en/about-zug-estates#investment-criteria>

Structure of Zug Estates Group as at 30 June 2023



Value chain of the Zug Estates Group:



All figures as at 31 December 2022. Key figures on energy and water from 1 April 2022 to 31 March 2023.

1.2 Values, ambitions and goals

Sustainable principles and values are firmly established in our company's DNA – at every level, from individual employees all the way to our Board of Directors. The Board of Directors and the Group management already began discussing their vision of a CO₂-free site – the Suurstoffi – more than fifteen years ago. Even then, decision-makers knew that the future lies in renewables and that greenhouse gases needed to be reduced swiftly and substantially.

An example of the fruits of these efforts can be seen in how the Suurstoffi site has evolved. There, Zug Estates forged new paths not only in terms of energy and emissions, but also through its emission-free, energy system. This green, spacious, traffic-free site is also impressive as a pleasant place for leisure activities and a high quality of life – important criteria for our tenants' well-being. Today, the site includes the Aglaya garden high-rise as well as the first (the S22 building) and the currently tallest (the Arbo building) wooden high-rises in Switzerland. Zug Estates has always succeeded in being one step ahead with its projects.

It attaches great importance to sustainability in all aspects of its operations and is a pioneer when it comes to sustainably developing and operating zero-emission properties. The company takes its responsibility seriously and is committed to upholding binding sustainability goals. Zug Estates has a net zero

strategy aimed at systematically reducing greenhouse gas emissions and preventing them if possible.

Last but not least, Zug Estates is committed to the principles of good corporate governance. This is shown by its efficient management structure, comprehensive control mechanisms and transparent information policy. The Code of Conduct² sets out the rules for ethical conduct for all Zug Estates Group employees and is given top priority. Reaching its sustainability goals has been part of performance-based remuneration of the Group management since 2023.

Our commitment

- Energy and emissions: 100% CO₂-free operation thanks to the zero-zero strategy.
- Development of living spaces: Attractive spaces for a higher quality of life.
- Economic viability: Sustainability implemented with business success.
- Innovation: Added value for people and nature through innovation.
- Materials: Promotion of a circular economy thanks to specifically selected materials and optimised use of grey energy during construction.

Most important goals

- Reduce the carbon footprint from operating the Suurstoffi site and the Metalli centre (Scopes 1

² <https://zugestates.ch/en/corporate-governance>

- and 2) to close to zero (first zero) by 2023.
- In the medium term, the newly acquired properties of Renggli Holding AG are to be further developed in line with sustainable principles and operated emission-free.
- Increase own electricity generation by means of photovoltaic installations and purchase power from regional renewable sources of energy (second zero).
- Reduce CO₂ emissions from construction and contribute to the circular economy. This will play an important role in the future development of the Metalli living space.
- Increase biodiversity by adding greenery to squares, roofs and façades.
- Maintain high tenant satisfaction through sustainable and diverse design as well as through active management and prudent transformation of living spaces.

A long list of topics was compiled based on internal and external sources (see figure below). Topics were selected and defined based in part on feedback from various stakeholder groups and obtained through tenant surveys, employee feedback gathered during brown bag events, roadshows, meetings with shareholders, investors and banks, as well as from assessments by ESG experts.

The topics were evaluated and assessed by the task force's internal experts during a workshop on identifying the relevance of the various topics in terms of value creation at Zug Estates. In addition, selected stakeholders (including financial and ESG analysts, investors, tenants and employees) were involved by means of individual interviews, surveys and research with a view to studying the relevance of the topics in terms of their environmental, economic and social impact (including human rights). This process took place in close co-operation with Group management and the Board of Directors of Zug Estates Holding AG.

1.3 Material topics

GRI 3-1 Zug Estates asked an interdisciplinary work group with Group management members and internal specialists to determine the most relevant ESG topics in 2020/2021. The work group included representatives from all relevant business units and processes such as risk management, procurement, compliance, property management, strategic site management and communication. A consulting firm specialising in sustainability strategies monitored the process.

Twelve topics of material significance emerged that form the basis for the materiality matrix. The Sustainability core team assesses the matrix annually. This year, due to thematic overlaps, it was decided to remove the "cooperative partnership" as a term and integrate it into the other main topics. Group management and the Board of Directors approved the change to the matrix.

Internal sources

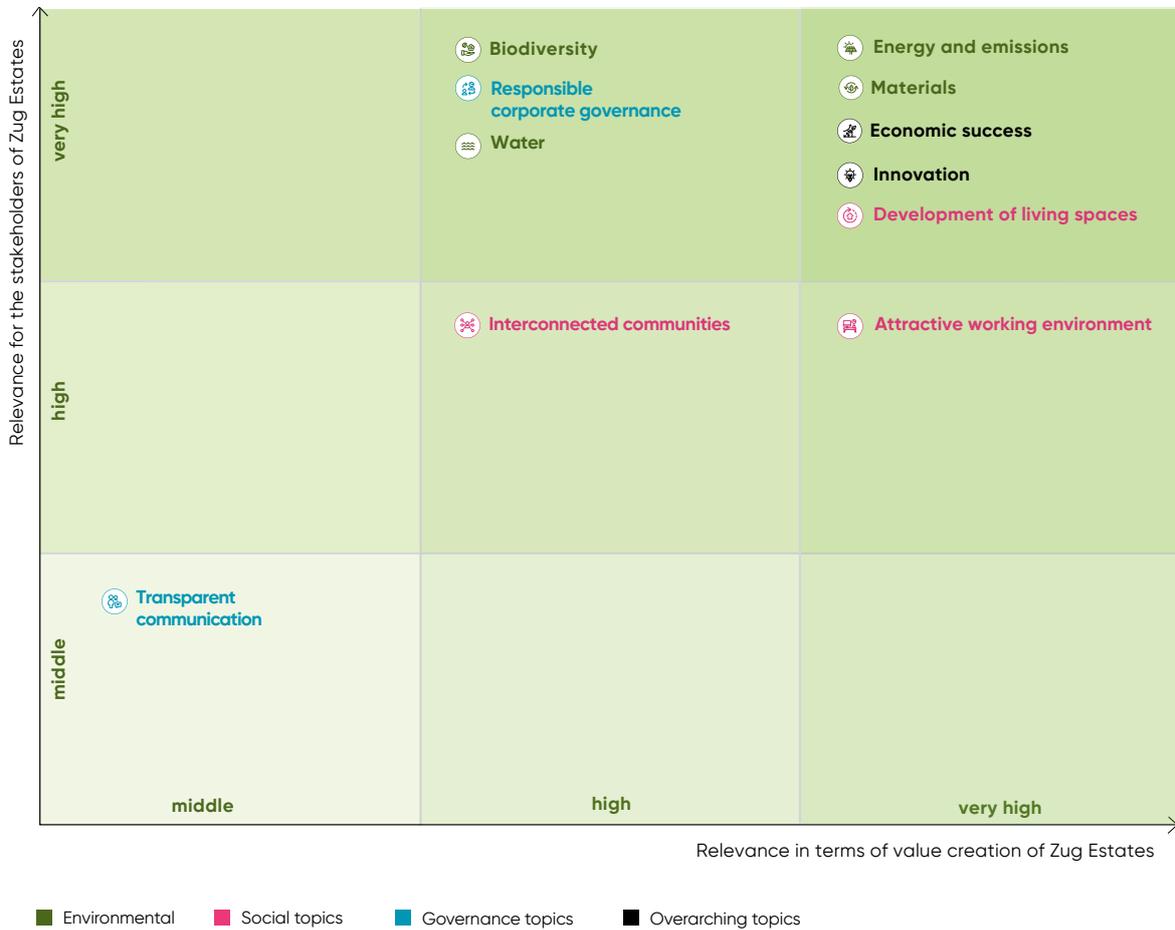
- Annual Report
- Sustainability report
- Guidelines and targets
- Risk analysis results
- Relevant market analyses
- Internal surveys and interviews
- Tenant surveys from previous years

External sources

- GRI Standards, incl. sector supplement
- SASB industry standards
- Industry-specific standards and guidelines
- Comparisons with competitors / sustainability reports
- Analysts' reports and media analyses
- External stakeholder surveys (shareholder, investor and bank meetings)
- UN Sustainable Development Goals (SDG)
- ESG evaluations

List of topics (long list)





The topics shown determine the structure of this report, which was prepared in accordance with the GRI Standards, and help us to further develop our sustainable business activities in line with current and medium-term priorities.

GRI 3-2 List of material topics:

Attractive working environment, biodiversity, energy and emissions, innovation, development of living space, use of materials, transparent communication, connected communities, responsible corporate governance, use of water, business success

As shown in the materiality matrix, Zug Estates is still mainly focused on environmental topics – and for a good reason. As a real estate company, we firmly believe we will have the biggest environmental impact through sustainable development, particularly if we reduce greenhouse gas emissions. Various studies have shown that CO₂ reductions are most urgently needed in the operation of buildings – an approach that Zug Estates has been successfully pursuing for over ten years (see “Reduction path” on page 21). The development of living space is also a priority, as it gives us a means of influencing the way people move, work and live in our living spaces over decades. Zug Estates therefore firmly believes in creating attractive, long-term living spaces by taking sustainable criteria into account.

1.4 Our stakeholder groups

The most important stakeholder groups either affect Zug Estates Holding AG's business activities significantly or influence the company strongly. The most important ones include:

- Shareholders and investors
- Tenants
- Employees
- The public and the Zug population
- Authorities and politicians
- Business partners and suppliers
- Financial and ESG analysts
- Media

GRI 2-29 Zug Estates regularly engages with its key stakeholders through surveys and personal meetings. The most important findings include:

- A population survey³ in Zug has shown that Zug Estates is on the right track with its plans for the Metalli living space.
- The employee survey indicated measures for improvements in the various teams and at the corporate level, which have been addressed to a large extent.

³ <https://www.lebensraum-metalli.ch/storie/die-bevolkerung-bringt-sich-ein>

- Commercial and office tenants as well as ESG analysts would like more transparency and comparability in the presentation of the sustainability credentials of buildings.

For details about our approach to getting key stakeholders involved as well as an overview of the concerns that these groups have raised, please refer to page 44.

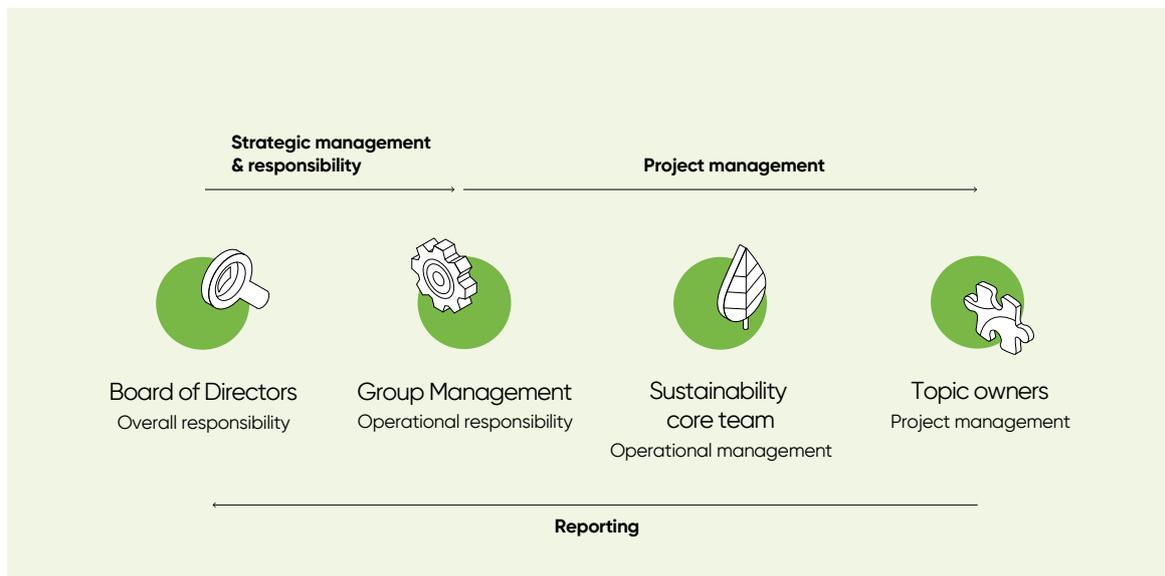
1.5 Sustainability organisation

To meet current and future challenges, the area of sustainability has been organised as follows.

As part of the company-wide strategy development, the Board of Directors is responsible for setting and monitoring the sustainability strategy. The Board of Directors assumes overall responsibility for sustainability.

The Sustainability core team, headed by the CEO, is responsible for implementing the sustainability strategy and reviewing the material topics. It is an interdisciplinary team that includes members of Group management. During the year 2022 under review, twelve meetings were held that generally lasted two hours. The core team reports regularly to the Board of Directors through Group management.

Sustainability organisation



The core team's tasks include:

- Strategic development of the material topics
- Initiation of new project ideas
- Operational control and monitoring of projects with sustainability aspects
- Acquiring expertise internally
- Boosting acceptance, information and involvement of employees
- Regular reporting on the effects, risks and opportunities of environmental and social issues

The organisational regulations describe in detail how responsibilities are divided between the Board of Directors and Group management.⁴

GRI 2-13

The Board of Directors and Group management approve this report in accordance with GRI Standards.

GRI 2-14

GRI 2-17 Each material topic (see materiality matrix) has been assigned to a person responsible for developing it independently and reporting to the Sustainability core team.

The Board of Directors has an active role in developing sustainability topics. The annual strategy workshop offers the Board of Directors and Group management the opportunity to study topics (including sustainability) in more depth and to further their education. External expert speakers and relevant stakeholders are invited, depending on the topic. Joëlle Zimmerli, a sustainability expert with a strong track record, joined the Board of Directors in 2023.

⁴ <https://zugestates.ch/assets/documents/211130-Organisationsreglement-Zug-Estates-Holding-AG.pdf>

1.6 UN Sustainable Development Goals (SDGs)

Zug Estates contributes to the following Sustainable Development Goals:⁵

⁵ <https://www.eda.admin.ch/agenda2030/en/home/agenda-2030/die-17-ziele-fuer-eine-nachhaltige-entwicklung.html>

| | Goal | Our contribution | Material topics for Zug Estates |
|---|--|--|-----------------------------------|
|  | Ensure access to affordable, reliable, sustainable and efficient energy for all | <p>Access to the private consumption community gives our tenants sustainable energy at attractive terms and conditions.</p> <p>The energy needed to run buildings (heating, hot water and air conditioning) is largely procured from renewable sources (Goal 7.2).</p> | Energy and emissions |
|  | Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation | <p>Zug Estates has implemented several sustainable projects with a national impact, including the anergy system at the Suurstoffi site, the first wooden high-rise in Switzerland, and the Aglaya garden high-rise.</p> <p>We are currently involved in the e-mobility project V2X (Goal 9.1).</p> | Innovation |
|  | Design cities and settlements to ensure they are inclusive, safe, resilient and sustainable | Zug Estates sets the pace for all of Switzerland with its Suurstoffi site, which was developed in line with key sustainability topics that include energy, emissions, materials, biodiversity and mobility. Topics that play a crucial role in developing the Metalli living space in Zug's city centre address not only environmental but also social aspects. For example, some of the apartments being built are in the low-price segment. Other important project goals include integration into surrounding neighbourhoods and the creation of pleasant public spaces (Goals 11.1, 11.3, 11.6, 11.7). | Development of living spaces |
|  | Ensure sustainable consumption and production patterns | <p>17% of all lettable space is located in wood or wooden hybrid buildings (Goal 12.2).</p> <p>Hotelbusiness Zug AG participates in the «Too Good To Go» project aimed at combating food waste (Goal 12.3).</p> <p>Zug Estates observes the principles of the circular economy. Wherever possible, the company preserves existing buildings, relies on secondary materials, chooses methods with high material efficiency for construction and, last but not least, uses building materials with low CO₂ emissions (Goal 12.5).</p> | Materials |
|  | Act quickly to combat climate change and its impacts | <p>Renewable local energy systems, renewable building materials (wooden construction), strong energy efficiency in newly constructed buildings, and green spaces in outdoor areas improve the sites' adaptability to climate-related hazards (Goal 13.1).</p> <p>Zug Estates has demonstrated its pioneering spirit repeatedly through the anergy system, the first wooden high-rises in Switzerland, and the garden high-rise. These projects have helped the company raise awareness of and educate people about sustainable infrastructure. We aspire to do the same in our Metalli living space development project (Goal 13.3).</p> | Energy and emissions Materials |

2. Overarching topics

2.1 Innovation

Relevance

At Zug Estates, we use innovations and the possibilities of digitalisation to increase the quality of our properties and services and to optimise operations and processes. Continuous innovation is essential for us to maintain our competitive edge in the long term and meet the expectations of various stakeholder groups, and our customers in particular. Finally, innovation is an important driver of Zug Estates' long-term business success.

Sustainability is a key driver of innovation. Our goal of managing properties with no greenhouse gas emissions and a minimum of external energy, as well as our claim of promoting the circular economy and biodiversity on our sites, prompt us time and again to question established practices and look for new approaches. Here, digital technology plays an important role, as it helps us create smart and integrated neighbourhoods that are more efficient, clearly add value for residents and the environment, and contribute to our business success.

Approach to the topic

Zug Estates has implemented many pioneering projects in recent years. These include the Suurstoffi site with its innovative energy system and a private consumption community for the entire site and outdoor space designed with a strong focus on greening and biodiversity, the realisation of the first (the S22 building) and the currently tallest (the Arbo building) wooden hybrid high-rises in Switzerland, as well as the Aglaya garden high-rise. With these projects, Zug Estates deliberately pushes the frontier, assumes calculable risks, and plays a pioneering role in the market by influencing decision-making at other companies.

Zug Estates looks for innovation opportunities in various areas and at different levels. It pursues ambitious goals and innovative approaches in planning and realising its properties, especially with respect to energy and emissions, as well as with materials and the circular economy. It promotes new concepts in the development and operation of the sites. Furthermore, it uses the possibilities of digitalisation to simplify processes, especially in the area of property management, and offers its customers optimised services.

Under its Group management, Zug Estates focuses on topics related to innovation and advances them for specific purposes. All the innovation topics are listed in a central file and reviewed with the project managers at regular intervals.

Zug Estates is committed to establishing innovation as an integral part of its corporate culture. This includes employees discussing new trends and visiting innovative projects and properties regularly.

We work with external partners to develop an open approach to promoting innovation more effectively in all areas of the Group's business activities. We regularly exchange information with other industry players to benefit from each other's experience. We are also a core member of Switzerland Innovation Park Central in Rotkreuz, where our employees regularly attend innovation workshops. We have established other innovation partnerships with various research institutions including the Lucerne University of Applied Sciences and Arts (HSLU), for example. Our collaboration with HSLU allows us to conduct research regularly to test and refine our ideas.

Zug Estates has been exploring the options in bidirectional charging since the fall of 2022 through its involvement in the V2X pilot project, which is funded in part by the Federal Office of Energy. This means: E-vehicles serve as energy storage devices and feed electricity back into the grid when not in use.¹

Results and evaluation

Zug Estates' entire portfolio reflects the company's pioneering role in managing greenhouse gas emissions, particularly in terms of sustainability and as a driver of innovations for supplying energy and for heating and cooling its properties. With 0.9 kg per square metre of energy reference area, the greenhouse gas emissions in the Zug Estates portfolio are about 93% lower than the industry average, which according to the REIDA study is 13.1 kg² (portfolio of participating companies).

¹ <https://zugestates.ch/stories/energieprojekt-haldenhof>

² https://www.reida.ch/images/REIDA_pdf/2023_02_28_REIDA_CO2-Benchmark_Medienmitteilung_final.pdf

Our various prizes, awards and accolades on a range of topics are testimony to our pioneering spirit.

- 2022: Second place in the ranking of Switzerland’s most eco-friendly companies
- 2018: Prix Lignum silver medal for the first wooden high-rise in Switzerland
- 2018: Award from the Swiss Association for Location Management for the Suurstoffi site

These recognitions motivate us to increase our efforts to find innovative solutions, examine how they might benefit our stakeholders, and implement them to best effect.

2.2 Business success

Relevance

Zug Estates aims to plan, realise, manage and further develop attractive and sustainable living environments for tenants and other parties. We can live up to our promise only if we operate profitably over the long term, which then enables us to meet our obligations to all relevant stakeholder groups.

Approach to the topic

Our sustainable and diverse living spaces are prerequisite for our long-term business success. Through sustainable and versatile design as well as active management and prudent conversion of our living spaces, we make our locations more attractive and enhance the quality of stays, thus positively affecting property income. In addition, we use specific synergies from the geographical concentration and diversified use of our living spaces to increase our service quality and optimise costs.

Zug Estates pursues a policy of active growth. Following the acquisition of Renggli Holding AG in November 2022, the focus has been on realising the potential available in the portfolio – in particular developing the city centre site in Zug as well as completing the Suurstoffi project and developing the Renggli properties in Rotkreuz.

Yet we do not view growth as an end in itself. We make acquisitions only if their quality and commercial benefits have a meaningful balance. This enables us to secure our long-term financial stability. It also requires us to keep our debt ratio at moderate levels, diversify our lenders broadly, and balance how we structure the contract terms.

Risk management

Comprehensive risk management is an important instrument for ensuring Zug Estates Group’s business success. The company regularly identifies, analyses and controls business risks as part of a clearly defined process involving all hierarchy levels, up to and including the Board of Directors. The Board of Directors defined the basic principles of risk management in the form of a risk policy (guideline).

GRI 2-12

Zug Estates prepares an annual risk report that categorises and weighs each relevant business risk by its probability of occurrence and loss potential. The report focuses on measures to reduce such risks. This process helps the Zug Estates Group to manage opportunities and risks so as to reach its goals. The risk situation of the Group must be comprehensively reassessed every three years. The Board of Directors controls Group management and supervises its work regularly. The Annual Report describes the various process and control instruments in detail.³ The Audit Committee is responsible for controlling and monitoring financial risks. Please refer to regulations of the Audit Committee⁴.

³ https://zugestates.ch/assets/documents/Zug_Estates_Annual_Report_2022.pdf, Page 32

⁴ https://zugestates.ch/assets/documents/211130_Regulations_of_the_Audit_Committee.pdf

Climate-related risks

Climate change has been increasing the risks from natural hazards. For a business to remain successful, it must keep these risks in mind and manage them

actively. The climate-related risks and their effects are addressed in Zug Estates Group's annual risk report and listed in the following table.

| Climate risk | Consequences | Assessment | Measures |
|---|---|--|---|
| Climate change is raising temperatures, causing lengthy heat waves, and increasing the number of heat days. | The need to cool buildings is thus increasing, and the energy required for doing so is driving up costs. | The system at the Suurstoffi site and the Circulago lake-water district can supply sufficient energy for cooling. | There are plans for some adjustments to the Suurstoffi's energy system (e.g. night cooling) |
| The heat island effect is causing cities to become steadily warmer, and | rising temperatures are affecting our sites. Since the heat island effect negatively impacts people's well-being, it not only makes a location less attractive but also lowers demand for living space. | At its own sites (especially the city centre site), Zug Estates can take measures to cool the microclimate. | Use of greenery and wet surfaces; provision of shade. In terms of construction, the choice of materials used for the building's exterior is a crucial factor for improving the microclimate. Preventing heat islands and providing shaded areas are key topics in the Metalli living space development project. |
| Damage from storms and extreme weather events is likely to increase, and we can expect more powerful storms and torrential rains in future. | There will be an increase in the number and size of loss events involving buildings and their surroundings, and insurance costs can be expected to rise. | The sites operated by Zug Estates are not in high-risk areas (landslides, flooding, rockfall) as shown on the risk zone plan* of Zug. No special preventative measures are necessary. | Structural measures and precautions to prevent damage from natural hazards, adaptation and optimisation of insurance cover, identification and implementation of technical precautionary systems in buildings, training and informing employees and tenants. |
| Taxes and CO ₂ levies will rise as a means of reducing greenhouse gas emissions. | Replacement of CO ₂ -intensive heating systems. | Since the portfolio already now is virtually CO ₂ -free, the risks from rising prices for greenhouse gas emissions or the cost of switching to lower-emission technologies are very low. | Even if it were to expand its portfolio, Zug Estates will continue to rely on CO ₂ -free heating and cooling systems. |
| Rising energy prices and energy nationalisation | Rising ancillary costs for tenants. Energy rationing leads to lower sales in the retail and hotel sectors. As this risk affects all operators of real estate, it must be considered as comparatively neutral. | A large part of the energy for cooling and heating comes from the company's own Suurstoffi energy system and from the Circulago lake-water district. For this reason, Zug Estates has below-average exposure to rising energy prices. Only a small share of the electricity is currently produced on the sites, and rationing would thus have a big impact on their operation. | Reduce fossil fuel dependency, ramp up own solar power production, increase energy efficiency of buildings, enter into long-term energy supply contracts. |

* <https://zugmap.ch/bmcl/?project=ZugMap.ch&legend=alle%20Themen&rotation=0.00&scale=51802¢er=2684000,1224000>

Results and evaluation

The Annual Report 2022⁵ of Zug Estates Holding AG explains the main developments in the 2022 financial year. We study the environmental impact of our green bonds⁶ annually as part of our green bond reporting. Internal minimum thresholds and targets are in effect for the most important financial ratios. The Audit Committee and the Board of Directors review them several times a year and take measures as needed.

Zug Estates' impressive track record in terms of sustainability helps it to raise borrowed capital. In 2019, for example, we became the first real estate company in Switzerland to issue a green bond of CHF 100 million. Zug Estates placed a second green bond for CHF 100 million in January 2022. This means the bond portfolio consists entirely of financial instruments focusing on sustainability. This should also be the case in future.

Since the portfolio is virtually CO₂-free today, the risks from rising prices for greenhouse gas emissions or the cost of switching to lower-emission technologies are extremely low. Zug Estates closely monitors technical and regulatory trends during its annual risk analysis to ensure that it can identify risks and seize opportunities in good time.

GRI 201-1 *Direct economic value generated and distributed*

Zug Estates had a very satisfying business result in 2022. Property income increased, and the vacancy rate reduced significantly. Sales in the hotel and catering segment recovered significantly against the previous year, which was still strongly influenced by the effects of the COVID-19 pandemic. For the details, please see the Annual Report 2022 of Zug Estates Group.

GRI 201-2 *Financial implications and other risks and opportunities from climate change*

The main financial consequences of climate change include an increase in damage to buildings and infrastructure from weather events as well as higher costs from cooling buildings and supplying them with energy. The financial consequences are manageable according to the internal analysis, as shown in the Assessment column of the table above. The analysis, assessment and derivation of measures for risk mitigation in connection with climate change (see page 17) are part of the risk report the Board of Directors and management prepares annually. Those consequences are factored into our site development plans – both with respect to the architecture and features of our buildings and the design of outdoor spaces.

⁵ https://zugestates.ch/assets/documents/Zug_Estates_Annual_Report_2022.pdf

⁶ <https://zugestates.ch/en/stories/green-bond-reporting>

3. Environmental topics

With regard to environmental issues, the core of Zug Estates' sustainability strategy is the reduction of greenhouse gas emissions. After Zug Estates has focused for a long time and with success on reducing emissions from operating its buildings (energy and emissions management approach), we will now in future pay closer attention to emissions during the construction of properties and sites (materials management approach). In addition, Zug Estates strives to strengthen biodiversity and conserve water in its properties.

3.1 Biodiversity

Relevance

Diversity in the ecosystems enables us to maintain life on our planet. For human beings to continue to exist in the long term, it is imperative that we regard biodiversity as a pivotal factor when designing our habitats. Urbanisation has boosted construction and caused a sharp increase in ground sealing in recent decades. Zug Estates, too, has sealed some areas through its construction activities – primarily at the Suurstoffi site. In the absence of adequate countermeasures, this will negatively affect biodiversity and ecosystems. For example, ground sealing causes less water to reach the soil and thus leads to a loss of natural habitat for animals and plants.

Approach to the topic

At Zug Estates, we take this topic seriously and consider biodiversity aspects when developing the outdoor areas at all our sites. This includes design and maintenance concepts for green spaces that facilitate and promote biodiversity. For technical support, Zug Estates works with landscape architects, gardeners and specialists. Based on professional recommendations, we have set ourselves the following goals for optimal biodiversity at our sites:

- When planning new outdoor spaces, we consider measures that promote biodiversity (e.g. greening of roof surfaces).
- We aim to manage outdoor spaces to promote biodiversity (e.g. no chemical treatment of soils; creation of natural patches where appropriate).
- Invasive plant species, referred to as neophytes, should not proliferate on Zug Estates sites and are removed/replaced regularly. Native plants are used where appropriate. Plants must always be matched to the location.

The Sustainability core team reviews all new development projects with regard to biodiversity. Furthermore, properties currently in the portfolio are reviewed and proposals for improvements are developed jointly with project and property managers. Here, specific measures to reach these goals range from complex projects, such as the design of semi-natural landscapes, all the way to minor steps that are easy to implement.

Our properties' outdoor spaces are intended as places where people can meet, spend time and enjoy themselves, and they should promote a sense of well-being and create an identity. Moreover, they should offer ideal conditions for plant and animal life as well as promote biodiversity. Since the outdoor and green spaces must accommodate human and natural uses equally, the likelihood of conflicts must be considered when planning and managing them.

An expert analysis of the space surrounding the Suurstoffi buildings carried out in 2022 identified potential for improving its quality and the experience of staying there, as well as for promoting biodiversity. Several workshops were held to discuss, evaluate and plan the measures to take. The work itself was carried out in the first half of 2023. This included redesigning the spaces as well as creating natural patches and constructing stone and deadwood piles to promote biodiversity on the east side of the site¹.

The Suurstoffi site was certified by the Nature & Economy Foundation in 2015 (first construction phase) and 2020². The Nature & Economy Foundation promotes the semi-natural planning and realisation of company sites, housing estates, schools, gravel pits and private gardens. It awards exemplary sites with a nationally recognised label and supports interested parties in planning and realising their projects.

¹ <https://zugestates.ch/stories/staerkung-des-aussenraumkonzepts>

² <https://zugestates.ch/stories/suurstoffi-erh%C3%A4lt-weitere-auszeichnung-von-natur-wirtschaft>

Results and evaluation

Own information: Proportion of certified land area of special ecological value: 57%

The entire Suurstoffi site of 105 342 m² (57% of all properties belonging to Zug Estates) has been certified by the Nature & Economy Foundation. The certificate is awarded to sites whose special ecological value contributes significantly to preserving natural biodiversity and that enable their residents to form a direct relationship with nature. The Foundation's sponsors prepare the criteria in consultation with cantonal planning authorities, nature conservation specialists, landscape architects and urban developers. Certification requires the following minimum standards, which have been confirmed for the Suurstoffi site:

- At least 30% of the surrounding land must be designed using semi-natural and structurally varied criteria.
- No more than 30% of the surrounding surface may be sealed.
- Semi-natural areas must be filled with a highly diverse range of indigenous plant species that are appropriate for the site.
- No biocides or fertilisers may be used in the semi-natural spaces.
- Semi-natural meadows will be cut no more than twice a year.

The Nature & Economy Foundation website has the complete list of criteria for residential sites.³ There are currently no plans to extend this certified area, as the conditions in the city centre site are completely different in an urban environment and other criteria would have to apply.

Suurstoffi site

High-quality beds of perennials, urban and residential gardens, a neighbourhood park, and wet surfaces are visible elements in the design surrounding the Suurstoffi site and help to promote biodiversity. Rooftops and façades are also included as potential spaces for biodiversity promotion. Zug Estates showcased green façade concepts with its Aglaya garden high-rise on the Suurstoffi site, where more than 15 000 plants grow on the sides of the 70-metre building. Bird nests and the sight of insects and butterflies all the way to the top indicate that the area's biodiversity has increased.

The short period since completion of the building has so far made it impossible to assess how the natural patches on the eastern side of the Suurstoffi site have affected biodiversity. In due course, Zug Estates will work with experts to conduct a field study to assess the situation and make changes as needed.

Metalli living space

The recommendations from the review, as well as those of landscape architects, concerning the topic of greening and biodiversity in the Metalli living space project have been incorporated into the adapted development plans, which have already been reviewed by the cantonal authorities and are now in the approval stage. The currently planned architectural competition requires biodiversity and heat reduction measures to be included. The invited teams must provide a qualitative description and explanation.

General greening and biodiversity are to be given greater emphasis compared to what is currently the case. This way, the current hard surfaces are loosened up here and there with soil for growth. At the new Metalli space and at the square in front of the UBS bank, large, shady trees will be planted in tree pits dug for this purpose. Furthermore, greening of the roof surfaces is planned as well.

3.2 Energy and emissions

Relevance

Zug Estates agrees with the research-based opinions that the climate change we are currently experiencing is largely the result of human activity. Greenhouse gas emissions cause global warming and lead to the climate change that has already begun. This impacts both people and nature. Some 40% of greenhouse gas emissions in Switzerland are caused by the real estate industry.

The Federal Council adopted Switzerland's long-term climate strategy on 27 January 2021 and approved its submission to the UN Climate Change Secretariat. This puts Switzerland in compliance with the Paris Agreement, which calls on all countries to develop climate strategies by 2050. If global warming is to remain below 1.5 degrees Celsius with a sufficiently high probability, worldwide CO₂ emissions must be brought to net zero by the middle of this century at the latest. This means that any CO₂ still being emitted then must be completely and permanently removed from the atmosphere through sinks (negative emissions). Zug Estates Group is fully committed to the goals of the

³ https://www.naturundwirtschaft.ch/assets/Dateien/Files/Medienmitteilungen/346/Antragsformular_Wohnen_28042021_interaktiv.pdf

Paris Agreement and the federal government's Energy Strategy 2050.

Approach to the topic

Zug Estates is aware of its responsibility relating to climate change. With its zero-zero strategy, Zug Estates has been pursuing two goals for over ten years: On the one hand, buildings should be managed emission-free, while as much energy as possible should be self-produced. Energy purchased from third parties must come from renewable sources. The Zug Estates sites – Suurstoffi and the city centre – have been operating virtually CO₂-free since this year (Scopes 1 and 2). The company therefore currently focuses on increasing its own electricity production (photovoltaics) and adapting the energy concepts for the newly acquired properties in the medium term.

The Group aims not only to reduce CO₂ emissions from operations to the best of its ability but also from construction activities (see the management approach to materials). Zug Estates will include this topic in its plans for developing the Metalli living space.

Zug Estates pursues a net zero strategy with the goal of systematically reducing greenhouse gas emissions or preventing them all together if possible. The Group's strategy does not include any CO₂ offset projects.

Efforts relating to energy and emissions fall into four areas where Zug Estates has set itself ambitious, far-reaching goals that go above and beyond legal requirements and industry benchmarks. To reach these ambitious goals, Zug Estates is taking comprehensive measures. The following section explains these four action fields in detail.

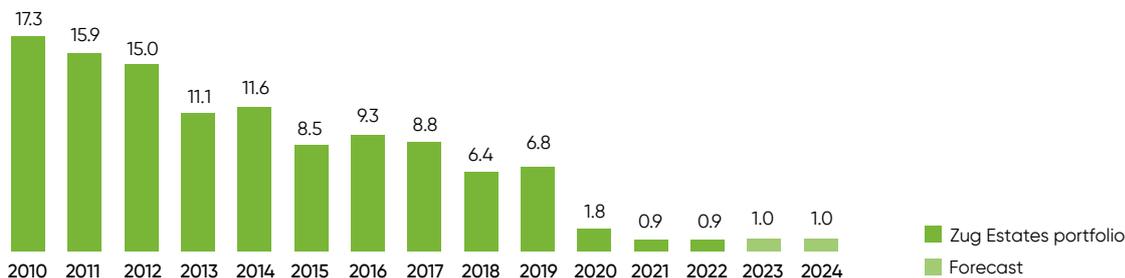
3.2.1 Action field: Emissions

Goals

We aim to manage our real estate portfolio largely without greenhouse gas emissions (Scopes 1 and 2). This includes any greenhouse gases emitted by the heating and cooling systems, from generating the operating current, as well as by our fleet of company vehicles.

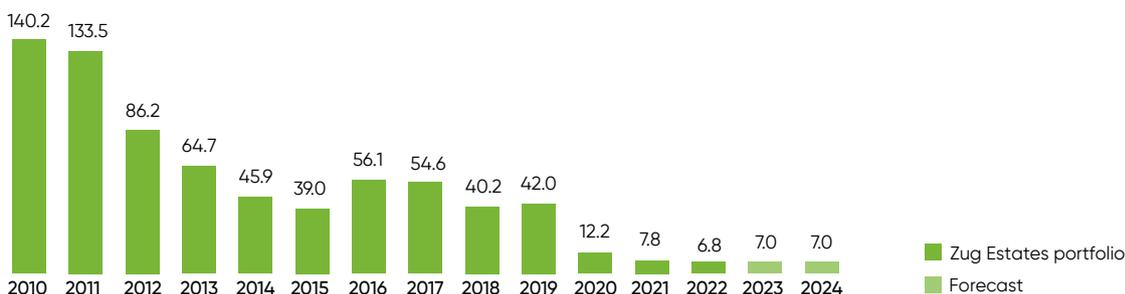
Reduction path Scopes 1 + 2 Zug Estates portfolio

Particularly greenhouse gas emissions [kg/m² ERA]



Reduction path non-renewable primary energy

Particularly primary energy non-renewable [kWh/m² ERA]



Measures

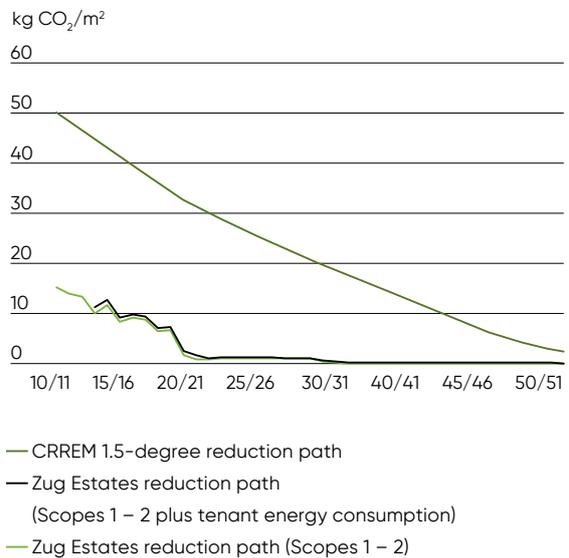
The Suurstoffi site was planned and built from the outset with the aim of operating CO₂-free. The Zug city centre site is now almost fully connected to the Circulago⁴ lake-water district so that all heating, cooling and water heating for all properties will be virtually CO₂-free. During the reporting period from 1 April 2022 until 31 March 2023, the most recent buildings to be converted and connected to Circulago were Haldenstrasse 9-16 and City Garden. Only the Bären property has not yet been connected for economic and ecological reasons. This switch is planned to correspond with development work on the Metalli living space, which will result in synergies. Operating the lake-water district is possible thanks to biogas certificates that compensate for gas-based peak load coverage, enabling the system to be run entirely without fossil fuels. The company's vehicles fleet will also be fully carbon-free by the end of 2024.

The Renggli portfolio, which was acquired in October 2022, is largely powered by fossil fuels. These properties are also to be supplied with renewable energy in the medium term. The energy systems will be adapted when the properties are developed. This depends on the current Rotkreuz site map⁵ being revised, and no binding schedule is thus possible at this stage.

Results

Zug Estates has reduced its greenhouse gas emissions by nearly 95% (Scopes 1 and 2) since 2010. The two Zug Estates sites now operate virtually emission-free. With emissions currently at 0.9 kg CO₂eq per m² of energy reference area (ERA), Zug Estates is already far below the 1.5-degree reduction path called for by the Carbon Risk Real Estate Monitor (CRREM), an EU-funded research project that aims to promote energy efficiency and reduce carbon-risk in the real estate sector. This makes Zug Estates a vanguard in the Swiss real estate sector.

CO₂ reduction path Zug Estates real estate portfolio and climate goals 2050



In the 2023 and 2024 reporting periods, greenhouse gas emissions are expected to drop slightly to 1.0 per m² of energy reference area. This is due to the acquisition of the Renggli portfolio as of 1 October 2022. However, emissions will still be at very low levels in absolute terms and remain well below the industry average.

3.2.2 Action field: Energy origin

Goals

We attach importance to ensuring that the energy for heating and cooling as well as the operating current for the building portfolio comes from renewable sources or is self-produced to the extent possible. In the year 2022 under review, 1 234 MWh (previous year: 1 140 MWh) of power was generated by the Group's own photovoltaic systems, which equals the electricity requirements of around 275 single-family homes. Solar power produced locally on our sites will continue to increase as we expand capacities in the long term.

Measures

A key measure involves switching from internationally sourced oil and gas to energy produced regionally by the Circulago lake-water district. Solar energy production (for electricity and heat) on the company's own sites will increase at the same time. The electronic main distribution of all properties of the private consumption community (PCC) on the Suurstoffi site were integrated into the PCC already in 2020. This enables Zug Estates to sell the electricity generated

⁴ <https://www.wvz.ch/de/ueber-wvz/blog/2020/waerme-kaelte/circulago-der-zugersee-die-regionale-energiezentrale>

⁵ https://www.zg.ch/behoerden/gemeinden/risch-rotkreuz/projekte-test/copy8_of_beispielseite

on site to tenants at attractive terms. Both sides benefit from this arrangement as tenants pay less for our electricity than they would through the local electric company and we earn more than we would through the feed-in compensation.

The amount of self-produced electricity will also increase gradually at the city centre site. In autumn 2022, six new PV systems were commissioned at

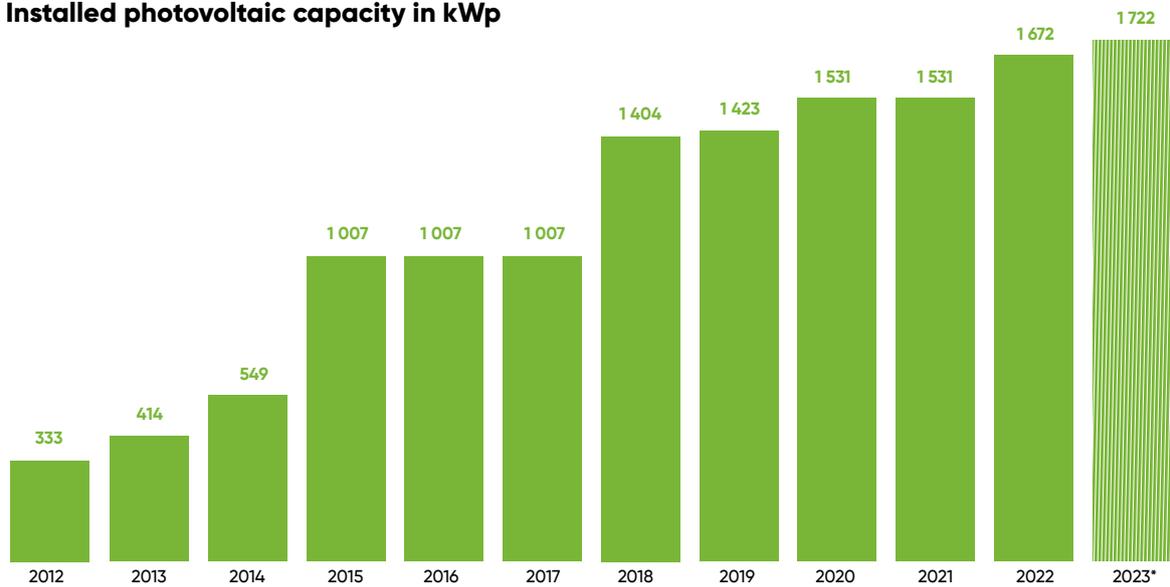
Haldenstrasse. Here, too, tenants have the option of joining the PCC⁶.

Furthermore, there are plans in 2023 to install a photovoltaic system at the Parkhotel with an output of around 50 kWp.

⁶ <https://zugestates.ch/zev-zentrumsareal>

Results

Installed photovoltaic capacity in kWp



* Forecast

Key figures on photovoltaics as at 31 December 2022

| | Total | Suurstoffi | City centre site / Metalli |
|--|----------|------------|-------------------------------|
| Number of buildings | 54 | 28 | 26 |
| Number of buildings with PV installations (share as a percent) | 30 (56%) | 24 (86%) | 6 (23%) |
| Properties with PV potential | 37 | 24 | 13 |
| Implementation rate of PV installations on buildings with meaningful PV potential | 81% | 100% | 46% |

The number of PCC customers at the Suurstoffi site rose to 365 as at 31 December 2022. This means a 15.5% increase compared to 31 December 2021. As the PCC customer base increases, a growing share of the power produced at a site will be also be used there. Own consumption rose from 86% to 96%, causing the feed-in to the public grid to decline from 14% to 4%.

3.2.3 Action field: Energy consumption

Goals

We intend to optimise the energy consumption of our site infrastructure and get tenants involved in implementing measures designed to boost efficiency. Specifically, we aim for a relative reduction in power consumption by our operations steadily by 2030 (operating current per m² of energy reference area). We also want to create incentives for customers in the PCC to reduce their power consumption.

Strategy for energy efficiency in buildings and in lighting:

- Make Minergie the minimum goal for new buildings
- Ensure that electrical equipment plus consumption meets the best standards for new buildings
- Convert lighting to LED and use it only as needed
- Use smart control system for indoor conditions: Ensure that heating and cooling meets environmental standards and is optimised. In summer, adjust the air conditioning system automatically to the outdoor temperature (Suurstoffi).
- Use smart automation systems in all buildings built before 2010. Upgrade systems in refurbished buildings wherever possible.

Measures

Zug Estates analyses the performance of its own site infrastructure continuously and uses the data to devise measures for optimising its operations. These include improving energy generating installations as well as distribution and lighting systems, for example. Zug Estates is also planning to introduce incentive schemes that could affect tenants' energy consumption positively. Schemes could include measures such as showing tenants their own resource consumption data to make them more aware and prompt them to lower their share.

Since 2021, we have switched the lighting in various areas (including the Suurstoffi underground car park) to LED to optimise energy consumption, among other things. Further retrofits for ancillary areas such as corridors, entrance areas or building entrances will follow.

As part of the federal government's energy-saving measures, we sent a letter to all tenants in autumn 2022 asking them to reduce their energy consumption.

Results

In 2020 and 2021, final energy consumption at the company's own operating properties decreased due to the pandemic at an above-average rate because of lower electricity consumption, among other things.

Since 2010, we have succeeded in reducing the operating current by more than 66% per m² of energy reference area. Operating current includes general electricity as well as electricity for the energy centres (incl. power for heat pumps).

Energy intensity

| Year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Final energy consumption kWh/m ² of energy reference area | 171 | 156 | 147 | 119 | 103 | 85 | 89 | 91 | 73 | 72 | 61 | 62 | 65 |
| Operating current in kWh/m ² of energy reference area | 87 | 79 | 75 | 65 | 44 | 40 | 40 | 41 | 36 | 34 | 26 | 26 | 29 |

Building certifications

Zug Estates measures energy and emission data based on actual values rather than on projections. The concept was developed with Lucerne University of Applied Sciences and Arts in 2010 and has been refined continuously. For this reason, none of the buildings of Zug Estates had been certified at the end of 2022.

OekoWatt GmbH reviewed the buildings on the Suurstoffi site, and it could thus be determined that they meet the standards for Minergie certification (measured against the standards that applied at that time).

As conditions for building certificates and labels as well as ratings have changed considerably in recent years and various stakeholders want more transparency and comparability, Zug Estates has looked more deeply into site certification. To take these developments into account and because the Suurstoffi site meets the sustainability standards, Zug Estates is seeking recertification of this site under the German Sustainable Building Council (DGNB).

3.2.4 Action field: Mobility

Goals

We promote CO₂-free mobility by creating optimal conditions for public transport use, electromobility, and other environmentally friendly mobility forms. Our goal is to continuously reduce the number of kilometres our employees commute in private motorised vehicles by creating suitable incentives. We also plan to continuously increase the number of charging stations for electric vehicles in Zug Estates' overall portfolio.

Measures

By setting up e-vehicle charging stations on the Metalli and Suurstoffi sites, Zug Estates is providing the prerequisites for its tenants to conveniently switch to e-vehicles. We conducted a survey to learn more

about our tenants' future mobility behaviour. This will allow us to better plan the additional charging stations to meet the demand from growth in e-mobility.

Within our company, we help employees forgo a parking space by granting a generous commuter allowance either to cover the cost of using public transport or as a financial contribution toward the cost of a bicycle. Zug Estates employees who commute to work by electric vehicle have had access to a free charging station at work since 2021. Zug Estates currently still has a fossil-fuel vehicle at Hotelbusiness Zug AG; however, it will be replaced by an electric one by the end of 2024.

The first public charging stations were commissioned on the Suurstoffi site in August 2022. Additional public charging stations are also planned for the Metalli shopping centre.

For more information about mobility relating to site development, see page 40.

Results

The solution Zug Estates has arranged with Energie 360° gives 100% of its tenants the opportunity to use an e-parking space.

There were 64 use contracts for e-parking spaces as at 31 December 2022 (previous year: 37). Compared to last year's report, this figure does not include the private charging stations of Aglaya condominium owners and the companies that are currently leasing space there.

E-mobility key figures

| | 31 December 2021 | 31 December 2022 | Change |
|---------------------------------------|------------------|------------------|--------|
| Number of charging stations installed | 48 | 78 | +55% |
| of which, public charging stations | 6 | 11 | +83% |
| Number of own fossil fuel vehicles | 1 | 1 | - |

* For the month of December

Overarching indicators

Energy and emissions

Energy consumption and energy intensity

The final energy consumption figures refer to heating oil and natural gas as well as to the operating current the heat pumps use to generate energy in the form

of hot water and heating for the real estate portfolio of Zug Estates. The balance sheet also includes mobility-related final energy consumption based on the fuel and electricity required for the company's fleet of vehicles. The following figures relate to the entire Zug Estates portfolio.

GRI 302-1 Energy consumption within the organisation

GRI 302-3 Energy intensity

| | Unit | 2021 | 2022 |
|---|--------------------|---------------|---------------|
| Fuel consumption, non-renewable (heating oil, natural gas, diesel and gasoline) | MWh | 1 218 | 1 202 |
| of which for thermal energy consumption (fossil) | MWh | 1 183 | 1 099 |
| of which for company-owned vehicles (fossil) | MWh | 35 | 3 |
| Fuel consumption, renewable | MWh | 0 | 100 |
| Circulago district heating | MWh | 5 641 | 6 196 |
| Circulago district cooling | MWh | 1 505 | 2 289 |
| Electricity consumption (general electricity and for heating, e-vehicles, incl. own consumption of photovoltaic power) | MWh | 7 251 | 7 950 |
| of which for general electricity | MWh | 4 381 | 4 437 |
| of which for heating (power for the heat pump's energy centre) | MWh | 2 867 | 3 512 |
| of which for company-owned electric vehicles | MWh | 3 | 2 |
| Final energy consumption, total | MWh | 15 615 | 17 637 |
| Final energy consumption per m ² of energy reference* | kWh/m ² | 62.4 | 64.6 |
| Final energy consumption per m ² of lettable area** | kWh/m ² | 70.1 | 73.0 |

* Refers to an energy reference area of 250 409 m² (2021) and 271 508 m² (2022)

** Refers to an energy reference area of 222 641 m² (2021) and 240 228 m² (2022)

No conversion tables are used except for heating oil, which is calculated at 10.5 kWh per litre.

The share of renewable energies came to 93% in 2022 (previous year: 92%). No natural gas (0%) was used (previous year: 0%).

Photovoltaic electricity production

| | Unit | 2021 | 2022 |
|---|------|-------|-------|
| Electricity production (PV installations) | MWh | 1 145 | 1 234 |
| of which for PV electricity for own consumption | MWh | 489 | 963 |
| of which for PV electricity sold (to tenants and fed into the grid) | MWh | 656 | 271 |

Greenhouse gas emissions (GHG emissions)

GRI 305-1 Direct GHG emissions (Scope 1)

GRI 305-2 Indirect energy-related GHG emissions (Scope 2)

GRI 305-3 Other indirect GHG emissions (Scope 3)

GRI 305-4 GHG emissions intensity

Greenhouse gas emissions include the CO₂ emissions that account by far for the largest part of the emissions of Zug Estates. The impact of other greenhouse gases such as CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃ is negligible. These emissions were broken down into scopes and calculated on the basis of the Greenhouse Gas Protocol (GHG Protocol).

| | Unit | 2021 | 2022 |
|--|--------------------------------------|--------------|--------------|
| Scope 1: (heating oil, natural gas, diesel and gasoline) | t CO ₂ eq | 230.0 | 247.6 |
| Scope 2: (general electricity, electricity for heat and for electric vehicles) [*] | t CO ₂ eq | 2.8 | 8.8 |
| Scope 3: | t CO ₂ eq | 132.7 | 1 61.2 |
| Tenant energy consumption (without Renggli Portfolio) | | 111.9 | 31.9 |
| Commuter mobility (Zug Estates AG) | | 20.4 | 28.2 |
| Business trips (Zug Estates AG) | | 0.4 | 1.1 |
| Total greenhouse gas emissions (Scopes 1–3) | t CO₂eq | 498.2 | 378.8 |
| Greenhouse gas emissions, Scopes 1 and 2 per m ² of energy reference area ^{**} | kg CO ₂ eq/m ² | 0.9 | 0.9 |
| Greenhouse gas emissions, Scopes 1 and 2 per m ² of lettable area ^{***} | kg CO ₂ eq/m ² | 1.0 | 1.1 |
| Out-of-scope emissions | | | |
| Peak load of Circulago district heating with biogas | t CO ₂ eq | 42.1 | 46.5 |

^{*} Scope 2 emissions are reported using a market-based approach (GHG Protocol, see the emission factors on page 28)

^{**} Refers to an energy reference area of 250 409 m² (2021) and 271 508 m² (2022)

^{***} Refers to 222 641 m² (2021) and 240 228 m² (2022) of lettable area

For further key figures on energy efficiency and intensity of greenhouse gas emissions by building use type, see Appendix (Chapter 7, from page 53).

Explanations of energy and greenhouse gas accounting

Amstein + Walthert in Zurich analyse and prepare data relating to energy and water.

System boundaries

The balance sheet includes all properties that Zug Estates owned during the reporting period. Co-owned (condominium) properties were taken into account if the heat was delivered by Zug Estates (contracting). New and refurbished buildings were taken into account only if they were used for the entire year under review. Properties sold during the period under review were not included. The Renggli real estate

portfolio with twelve properties purchased in the reporting period was included in the balance sheet for the period from October 2022 to March 2023. Some properties purchased during the reporting period will be included only in the following year. The electricity required for own-use office and hotel spaces of Zug Estates was included in these calculations, as were the heating energy, general electricity and water consumption of the properties in question.

Data relating to energy and water is always reported from 1 April to 31 March of the following year. For example, the 2022 year under review refers to the period from 1 April 2022 to 31 March 2023. Mobility data are

collected or estimated annually. Commuter mobility data is collected annually. The energy reference area (ERA) and lettable area figures are used as reference areas. Energy reference areas were first calculated in 2020 and replace the lettable areas when calculating intensities.

Tenant/landlord interface

Zug Estates always procures the heating energy itself and then passes the costs on to tenants through its heating bills. Heating energy is thus included in full in the calculations. The same applies to electricity in common spaces and to ventilation and air conditioning of rented spaces. The electricity that tenants use is included in the balance sheet only for the greenhouse gas emissions in Scope 3.

Degree of cover and estimates

The report covers all properties currently in operation within the defined organisational boundaries. Consumption under the integrated Renggli portfolio is included over a half-year observation period. For properties without a final utilities invoice or that had no measured consumption values when the reporting period ended, consumption was estimated based on similar properties.

Accounting for greenhouse gas emissions

Greenhouse gas emissions are included in the balance sheet in accordance with the Greenhouse Gas Protocol (GHG Protocol). Scope 1 has the emissions from heating oil and natural gas to generate heat as well as from the use of gasoline and diesel in the company's own vehicles. Scope 2 has emissions from generating purchased electricity as well as from heating and cooling capacity procured from the Circulago lake-water district. Scope 3 has emissions from commuter mobility and from generating electricity used by tenants and business trips.

Amstein + Walthert confirmed full and correct implementation of energy and greenhouse gas offsetting.⁷

⁷ https://zugestates.ch/assets/documents/Bestaetigung_Bilanzierung_Zug_Estates_AW.pdf

Emission factors

Fuels:

BAFU, 2019, CO₂-emission factors of Switzerland's⁸ greenhouse gas inventory); Alig, M., Tschümperlin, L., Frischknecht, R., 2017, greenhouse gas emissions from Switzerland's electricity and district heating mix in accordance with the GHG Protocol⁹.

Electricity, district heating/cooling:

Alig, M., Tschümperlin, L., Frischknecht, R., 2017, greenhouse gas emissions of Switzerland's electricity and district heating mix in accordance with the GHG Protocol.

Company vehicles (fossil) and commuter mobility:

Mobitool 2.1¹⁰

Most important changes in the balance sheet

- Renggli Immobilien's portfolio with 12 properties was newly included in the balance sheet for a half-year period (Oct. 22 – Mar. 23).
- The properties Haldenstrasse 3+5, Haldenstrasse 9-11, Haldenstrasse 12+14+16, and Metallstrasse 20 will now be supplied with district heating.
- The electricity source product for the 22/23 period in accordance with the guarantee of origin (GoO) CKW consists of 40% national run-of-river production and 60% European hydroelectricity.
- From 1 January 2023, the two hotels at Industriestrasse 14+16 and Metallstrasse 20 will also purchase the electricity origin product in accordance with the GoO for the entire portfolio.
- The Zug Estates corporate fleet was reduced in February 2022. The BMW M550i (fossil fuel-powered) and two golf carts (electricity-powered) are no longer part of the vehicle fleet and were therefore not included in the balance sheet.
- For the first time, air travel for business was also analysed (Scope 3).
- Correction of wrong emission factor for emission calculation of tenant electricity (Scope 3). In the previous calculation, an emission factor for Swiss supplier mix electricity of 0.1224 kg/kWh was used instead of the factor 0.01224 kg/kWh in accordance with the AIB 2020 source.

⁸ https://www.bafu.admin.ch/dam/bafu/de/dokumente/klima/fachinfo-daten/CO2_Emissionsfaktoren_THG_Inventar.pdf.download.pdf/CO2_Emissionsfaktoren.pdf

⁹ https://treeze.ch/fileadmin/user_upload/downloads/Publications/Case_Studies/Energy/619-GHG_Strom_Fernw%C3%A4rme_v3.0.pdf

¹⁰ <https://www.mobitool.ch/de/tools/mobitool-faktoren-v2-1-25.html>

3.3 Materials

Relevance

Currently, Switzerland has 6.9% circularity across all sectors, which is slightly below the global average of 7.2%¹¹. As a small country, Switzerland obtains most of its raw materials through imports, thereby contributing to consumption and emissions in other countries. The extraction and processing of materials causes 70% of greenhouse gas emissions and over 90% of biodiversity loss globally. A change in production and consumption patterns in Switzerland can improve the situation both at home and abroad.

The construction sector is responsible for around 50% of raw material requirements, one third of CO₂-emissions, and over 80% of waste generation in Switzerland. At the same time, construction activity is expected to remain strong so as to support Switzerland's further demographic and social development. A more circular construction industry is an urgent priority in response to mounting resource consumption and contributes to reaching the climate goals in Switzerland and globally.

In the real estate industry there are two main drivers of CO₂ emissions: the procurement and production of raw materials for construction and the energy demand for heating, cooling and supplying the buildings with electricity. Zug Estates has reduced its CO₂ footprint from operating buildings to a minimum (see section on energy and emissions) and will now focus on the grey energy contained in the building materials used. In its construction projects, Zug Estates has the opportunity to help reduce grey energy.

Approach to the topic

By focusing on preserving the existing buildings and on recycling-oriented construction, Zug Estates conserves primary resources and landfill space and reduces CO₂ emissions from its construction activities. In its development and construction activities, Zug Estates aims to build for the long term, reduce the use of materials, reuse materials, and consider the choice of materials more carefully. To align the construction industry more closely with the circular economy, Zug Estates will promote and use innovations such as digitalisation and develop new business models and processes. Project managers will learn about current developments through regular exchanges with research and innovation partners.

By participating in conventions and lectures, Zug Estates contributes to building expertise and developing the industry and to jointly learning more and making progress with these topics.

Zug Estates pursues the following specific goals with respect to reducing grey energy and using construction materials, in particular in its plans for the Metalli living space and the Suurstoffi 43/45 sites:

- Minimise the number of existing buildings to be deconstructed. Re-use or recycle deconstructed materials on site whenever possible.
- Consider recyclability and grey energy when choosing materials. Prioritise any recycled materials that are available.
- Create the conditions needed for these materials to be deconstructed, re-used or recycled by means of digital planning, lean management with prefabrication, and the use of smart connection technologies.
- Use efficient and simple solutions in building services to optimise operating energy costs on the one hand and to reduce grey energy during construction on the other (example the Suurstoffi 43/45 site).

Ambitions related to grey energy

CO₂ emissions during construction (grey energy) are to be minimised for new buildings. Grey energy is measured based on kg of CO₂eq/m² of energy reference area. A material passport and ecological assessment must also be prepared. New buildings must comply with this key figure.

Circular economy

Strategies for promoting a more circular economy must be applied when constructing or demolishing buildings. This means selecting suitable compounds and materials that can be reused as fully as possible for new projects once they have reached the end of their usable life. A material's circularity is measured with a material circularity indicator. Zug Estates joined the Madaster network in August 2022 to gain experience with a digital material cadastre.

On 27 June 2023, Zug Estates also signed the Reuse-Oriented Construction Charter¹². In it, members commit to considering various actions and implementing selected ones by 2026. The topics include "Renovate instead of building new", "Build for the long term", "Reduce material use", "Reuse", "Choose the

¹¹ <https://www.sustainablewitzerland.ch/>

¹² www.cbcharta.ch

right material", and "Reduce waste". Zug Estates co-developed the Charta together with eleven public and private partner organisations. Switzerland Innovation Park Central, located at the Suurstoffi site, will organise the future exchange of experience among the partner organisations and develop the Charta further¹³.

Tenant waste

Household waste is collected in sacks that are subject to a fee and can be dropped at several collection points at the Metalli and Suurstoffi sites. The same applies to green waste (compost). Recyclable material such as glass, PET, cardboard, paper, as well as hazardous waste can be dropped at the public disposal points. One of these, Ökihof Zug, is located 500 metres from the Metalli site, and another recycling centre is situated right next to the Suurstoffi site in Rotkreuz.

Parkhotel Zug is taking steps to combat food waste and is committed to ensuring that food produced for the weekly Sunday brunch is consumed. Users can obtain leftover items via the Too Good To Go app.

Results and evaluation

Zug Estates had no new construction or conversion projects during the year under review. Large construction projects to be launched must be systematically evaluated against the signed Charta to determine their circularity.

During the planning phase of the development of the Metalli living space, Zug Estates already decided on measures to significantly reduce grey energy. Work on the existing buildings must be kept to a minimum. In various places, therefore, the building will be extended rather than rebuilt. Furthermore, ideas on how some materials can be recycled in the new building are being discussed. Zug Estates has set itself the goal of measuring the grey energy and providing corresponding specifications for the planned architectural competition.

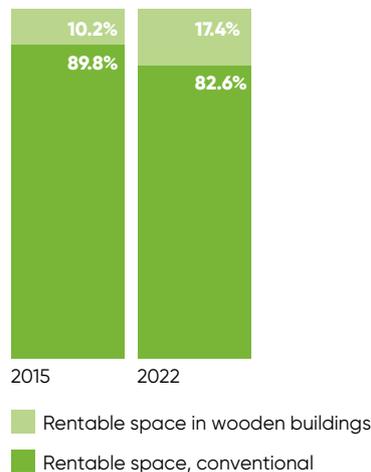
Wood construction

Wood is highly relevant for Zug Estates as a building material, not only due to its low grey energy value but also because it binds CO₂ for the entire period of use and thus keeping it out of the atmosphere. We have been relying on wood as a building material for more than ten years and completed several pioneering projects during this time. We completed our first

wooden building, the City Garden Hotel in Zug, in 2010. This was followed up in 2014 by nine buildings and 156 apartments – the largest wood construction project in Central Switzerland – at the Suurstoffi site. In 2018 we developed the S22 building, Switzerland's first wooden high-rise. 2019 then brought the Arbo, a 60-meter building that is currently Switzerland's tallest wooden high-rise. Both the S22 and the Arbo buildings are on the Suurstoffi site.

A study in cooperation with Lucerne University of Applied Sciences and Arts and Erne AG Holzbau found that wooden hybrid construction can save between 10% and 15% CO₂ compared to solid construction. The construction of ceilings and supports are especially relevant. The façade materials and the design of the underground levels also have strong potential for minimising grey energy consumption. This was one of the reasons why Zug Estates decided to not include an underground level in the planned S43 building. The study¹⁴ shows that choosing wood led to lower CO₂. Constructing with wood will therefore continue to be an option for Zug Estates.

Percentage of rentable space in wooden buildings as share of overall space



¹³ <https://zugestates.ch/stories/lancierung-charta-kreislaforientiertes-bauen>

¹⁴ https://zugestates.ch/assets/documents/20220930d_Schlussbericht_HSLU_Holz-Hybrid-und-Massivbau-anhand-vier-Geb%C3%A4uden.pdf

3.4 Water

Relevance

Water is becoming an increasingly scarce commodity due to climate change, and we can expect more frequent and longer periods of drought even in water-rich Switzerland.

Every real estate company contributes to increasing water intensity locally when managing its buildings. In business relationships, water consumption is particularly relevant at the upstream value creation stage. During construction, there is a risk of polluting groundwater or water bodies. And finally, important soil functions, especially water permeability and soil fertility, are lost when ground is sealed during construction of buildings or paths.

Consequently, residential and commercial tenants have strong influence on water consumption.

Approach to the topic

Zug Estates aims to preserve water as a resource and ensure that it is used prudently during the development and construction phases and when properties are in operation.

During the construction phase, the protection of groundwater and water bodies is subject to contracts for work and services. Here, contractors undertake to comply with the regulations on water protection and take measures to prevent water pollution.

Zug Estates aims to minimise soil sealing and will plan and provide retention systems and storage facilities as needed to curb surface runoff and to channel rainwater into the groundwater supply. The recovered meteoric water can be put to good use in gardens, for example. This helps us reduce the amount of water we draw from the municipal supply.

To help tenants reduce their water consumption, for example, we install water-efficient appliances and water-saving devices. Our management team raises awareness among tenants through specific information to encourage them to save water voluntarily. Aer-

ators are installed in the showers and taps of all hotel rooms of Hotelbusiness Zug AG.

We have set ourselves the following goals to ensure that our approach to water use is sustainable and efficient:

- We strive to improve drinking water consumption continuously. While doing so we focus directly on consumption within the company's own business segments (real estate and hotels & catering) and on tenants' indirect consumption.
- To minimise surface runoff, we intend to have all newly planned outdoor spaces designed to meet the minimum standards of the Nature & Economy Foundation (see the section on Biodiversity). Current spaces are to be renatured wherever possible.
- We prevent pollution and contamination of all kinds and thus contribute to ensuring that regionally clean drinking water is publicly available at all times.

We have studied carefully how we manage meteoric water, particularly in our Aglaya garden high-rise. The building has an underground cistern that collects water from the roof of the residential tower and surrounding buildings. The water is then pumped from the cistern to the plant troughs on the building's exterior. This concept could serve as a model for other new construction projects.

The Water Risk Atlas of the World Resources Institute indicates that both Zug Estates sites are in water-rich regions¹⁵. There is no indication of water scarcity or poor drinking water quality at present. In its development projects, Zug Estates focuses on the canton of Zug and the neighbouring cantons (especially Zurich and Lucerne)¹⁶, which are also non-critical in terms of water availability. Water use and intensity by the rental spaces is measured annually per building. Irregularities or significant rise in consumption can thus be identified and addressed.

¹⁵ <https://www.wri.org/applications/aqueduct/water-risk-atlas/>

¹⁶ <https://zugestates.ch/en/about-zug-estates#investment-criteria>

Results and evaluation

There was no contamination or pollution of drinking water or water bodies during the year under review.

tor-specific standards. In addition, the risk of hazardous substances is very low due to the building's use (residential, office, retail and hotel & catering).

GRI 303-1 *Water as a shared resource*

See the section entitled "How we address the material topic".

Water use

GRI 303-3

Zug Estates has no contractual ways to impose drinking water consumption limits on its tenants and therefore relies on joint information campaigns with local water suppliers and on voluntary actions and measures. For this reason, it has so far refrained from defining target values for consumption. Zug Estates does not source water from areas experiencing water stress.

GRI 303-2 *Managing the effects of water recirculation*

All the properties are connected to the public sewer system. Both communes where the sites are located have regulations^{16, 17} for managing their wastewater. As Zug Estates meets the requirements of the communes and thus complies with legal provisions, we have not defined any internally developed wastewater quality standards, minimum requirements or sec-

| | Unit | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------------------------|---|---------|---------|---------|---------|---------|---------|
| Water use | m ³ | 123 371 | 144 207 | 147 057 | 138 027 | 131 570 | 150 350 |
| Water intensity | m ³ /m ² LA (lettable area) | 0.84 | 0.87 | 0.83 | 0.62 | 0.59 | 0.63 |
| Square metres of lettable area | | 146 979 | 170 290 | 181 777 | 222 641 | 222 641 | 240 228 |

Water origin

The water for both sites (all of the properties) is purchased from two local providers.

| Site | Water supplier | Headwater region | Spring | Quantity in m ³ (2022) |
|-----------------------------|---|------------------|-------------------------|-----------------------------------|
| Suurstoffi site | Wassergenossenschaft Rotkreuz ¹⁷ | regional | Spring and ground water | |
| City centre site / Metalli | WWZ AG, Zug ¹⁸ | regional | Spring and ground water | 78 437 |
| Other investment properties | Water cooperative Rotkreuz WWZ AG, Zug | regional | Spring and ground water | 4 413 |

¹⁷ <https://wgr-rotkreuz.ch/home.html>

¹⁸ <https://www.wwz.ch/de/privatpersonen/wasser>

4. Social topics

4.1 Attractive working environment

Relevance

Competent and motivated employees are the key to the success of companies. Zug Estates is therefore committed to creating attractive working environments where employees are empowered to contribute toward our corporate goals while developing themselves at the same time. We provide competitive working conditions and meaningful tasks to attract the very best candidates so that we can reach our goals.

Approach to the topic

The CFO at Zug Estates AG and the general manager at Hotelbusiness Zug AG each head the respective human resources departments, with operational support of their HR managers. Both companies have specific goals to create and maintain the desired working environment. For example, the Zug Estates Group aims to keep its annual turnover rate low in the interest of retaining expertise, but at the same time is looking ways to bring in new ideas from outside the company. The turnover rate is discussed monthly in the management meeting so that measures can be taken quickly. The HR department reviews overtime and unused leave entitlements monthly to identify work overloads at an early stage and prevent absences. Both the turnover rate as well as the overtime and unused leave entitlements are included in the standard reports of the monthly Group management meetings of Zug Estates AG.

The employment and working conditions are laid out in various documents. In autumn 2021, the Employment Policy; Personnel Policy (incl. the Code of Conduct), Securities and Insider Trading Policy, Policy on Handling Gifts and Invitations (anti-corruption), and the Directive on the Protection of Personal Data (Discrimination) were revised for Zug Estates AG (for details, see the chapter on Responsible corporate governance). All employees were informed about the new documents. The same also applies to new employees. The Personnel Policy and the Employment Policy for Hotelbusiness Zug AG were reviewed in the second half of 2022. Individual benchmarks were adjusted at beginning of 2023, and the completely revised employee manual will be introduced and distributed to all employees at the beginning of October 2023.

Zug Estates AG participated in an external wage comparison in 2021, which found that the company pays wages appropriate for the industry.

Collective agreements

GRI 2-30

Employees' terms of employment differ among Group companies. No collective agreements are in effect for employees of Zug Estates AG. 101 of the 108 employees (93.5%) of Hotelbusiness Zug AG are subject to the national collective labour agreement (N-CLA) for the hospitality industry. All in all, 61.6% of employees work under a collective labour agreement.

Training and further education

Employee training and further education ensure our employees' expertise is always up to date. All employees must spend an average of two days per calendar year on training and further education. Training and further education measures are planned during the annual performance appraisal with the line manager. All employees meet with their line manager for a performance appraisal at least once a year. HR controls whether these appraisals and further education measures have taken place and documents them.

Zug Estates is involved in external training programmes and either covers a portion of the course fees or grants time off or leave entitlements.

The brown-bag format has established itself for informal information exchanges. Whether online or on-site, employees can learn more about specific topics or participate in discussions. Participation is optional.

Zug Estates Group is committed to vocational training and offers apprenticeships to school-leavers every year. As at 31 December 2022, the Group had eight apprentices (previous year: seven).

Diversity and equal opportunity

In the area of diversity, our goal is to increase the proportion of women in management and senior management positions to achieve a balanced gender ratio at all hierarchical levels in the medium term. We contribute to these efforts by offering part-time models and flexible working hours (annual flextime model). Finding suitable candidates is difficult at the senior management level and in Group management, partly due to the nature of the industry. Zug Estates therefore plans to focus more strongly on internal promotion.

No job seekers are rejected based on their age, gender, identity or nationality. During the application process, we attach great importance to ensuring diversity as described above, all the way to the last round of interviews, and offer the job to the person who best meets the requirements regarding specialist and industry knowledge, personality, and other factors.

We offer equal pay for equal work. Employee experience is also considered.

GRI 2-21 Ratio to annual remuneration

At Zug Estates, the ratio of the highest pay to the median of all employees (excluding the highest pay) is 4.26:1. The ratio of the percentage increase in the highest annual pay compared to the percentage increase in the median (excluding the highest remuneration) was 0.66:1 in 2022.

The analysis includes Zug Estates Holding AG and Zug Estates AG, and the total compensation includes the annual salary as well as the bonus for the respective year under review. For the calculation, all annual salaries and bonuses were extrapolated to a full-time position.

Data privacy and the complaints process

All employees of the Zug Estates Group have the right to protection of personal integrity at work (regarding their age, ethnicity, disability, religion, gender, sexual orientation, etc.). Personal integrity violations negatively impact employees' well-being and collaboration within the company and are not tolerated within the Zug Estates Group. Any and all conduct resulting in a personal integrity violation is considered unacceptable. This includes discrimination, sexual harassment, bullying, and exploitation of any kind.

Any measures taken to safeguard employees' personal integrity always apply to temporary and external staff, as well as to partners and suppliers.

In case of a personal privacy violation, employees can file complaints through the regular complaint channels. The complaint procedure is described in detail in the Responsible corporate governance chapter on page 47. No cases were reported in 2022, the same as in the previous year.

Terms of employment

The employment contract defines weekly working hours as annual working hours for all employees of Zug Estates AG. The calculation period for annual working hours is defined as a whole year. Daily working hours are also flexible. A combination of annual working hours and flexible hours maximises the scope in scheduling while optimally allowing for changing market conditions during the year, the operational requirements of Zug Estates, and the individual interests of employees.

The annual working time model is set up so that employees can take time off, even at short notice, if there are emergencies in the family or for urgent personal reasons. Otherwise, brief absences for personal reasons should be scheduled during non-core hours.

All employees of Zug Estates AG in full-time positions can work from home for not more than two days per week. For employees with fewer weekly working hours, the line manager decides whether working from home is an option and what share of the work this could involve. The general conditions and requirements are set out in the Work from Home Policy. The commuter mobility analysis showed that in 2022 employees spent 14% of their days working from home (2021: 20%).

There is no general entitlement to having unpaid leave. In consultation with Group management, however, unpaid leave (short-term or long-term) may be granted if operational circumstances permit. The precise terms of such leave must be discussed with the HR manager. In 2022, two requests for unpaid leave were submitted and approved.

Part-time working hours are possible in all areas and at all hierarchy levels of Zug Estates. In principle, there is enough flexibility for employees to assume a 60% workload over three days or for a reduction in the daily hours worked. As at 31 December 2022, 20.8% of all employees (women: 43.7%, men: 10.8%) at Zug Estates AG worked part time. Across the entire Group, 32.9% of employees worked part time.

Changes in working hours (increases or reductions) are possible if operational requirements can be met. Employees must submit their request through their line managers, and Group management must approve the request. In 2022, a total of eleven requests were submitted, all of which were approved, as in the previous year.

Additional benefits

Zug Estates AG has adopted a number of measures that exceed the minimum prescribed by law:

- For example, it has taken out additional insurance that supplements statutory benefits in accordance with the UVG (Accident Insurance Act). Under this policy, 80% of the portion of the salary that exceeds the salary covered under UVG is insured for two years from the date of the accident.
- Employees unable to work due to an accident or illness through no fault of their own are entitled to 100% of their net salary. This benefit is available between one and six months, depending on the number of years of service.
- Maternity leave: After having given birth, female employees are entitled to daily benefits equalling their full salary (excl. bonuses/gratuities) for 16 weeks.
- Paternity leave: We continue to pay fathers their full salary during the statutory two-week paternity leave.
- Accident insurance supplement: The policy covers hospital stays in the private ward.

Health

Zug Estates attaches great importance to employee health and promotes it by creating friendly work conditions.

The sickness rate at the Zug Estates Group rose from 3.8% to 5.4% year on year. The accident-related absence rate rose from 0.2% to 0.9%. This is mainly due to the hotel & catering segment. The reasons for illnesses are not recorded, for data privacy reasons. This calculation is based on the sum of all target hours for the entire workforce as stipulated in the employment contracts. A company-organised running group encourages employees to exercise and boosts their sense of solidarity within the Group.

Results and evaluation

Employee satisfaction

We conduct surveys every two years to measure employee satisfaction. The most recent employee survey was conducted by Great Place to Work (GPTW) in November/December 2021. Based on the positive responses, both Zug Estates AG and Hotelbusiness Zug AG were certified by Great Place to Work for the year 2022.

The results were presented, evaluated and discussed at several senior management and employee workshops. The management culture was rated positively at Zug Estates AG, which confirms managers' availability and willingness to provide information. Employees appreciate the fair treatment and team spirit and the sincere interest in them as individuals. There is, however, room for improvement when it comes to collaborating across departments, and with the workstations. In this regard, some measures, such as providing standing desks, have been implemented. With the move into the new premises at the Metalli site at the beginning of December 2023 and the merging of the two office locations, further improvements will take place and, in particular, a basis will be created to improve cooperation across departments.

Employees of Hotelbusiness Zug AG appreciate the fair treatment they experience regardless of gender, ethnic origin or nationality, as well as the good integration of new employees. The employee remuneration system can be improved, as can support for further education. At the beginning of 2023, some measures were implemented with the adjustment of individual benchmarks in the Personnel Policy.

The next employee survey is scheduled for the first half of 2024.

GRI 405-1 Diversity within governance bodies and among employees

| | Number | <30 years | 30-50 years | >50 years | Men | Women |
|---------------------------|--------|-----------|-------------|-----------|-------|-------|
| Board of directors | 5 | 0% | 0% | 100% | 80% | 20% |
| Extended Group management | 6 | 0% | 66.7% | 33.3% | 83.3% | 16.7% |
| Management | 34 | 2.9% | 64.7% | 32.4% | 70.6% | 29.4% |
| Employees | 116 | 17.2% | 56.9% | 25.8% | 42.2% | 57.8% |
| Trainees | 8 | 87.5% | 12.5% | 0% | 25% | 75% |
| Total | 169 | 16.6% | 55.0% | 28.4% | 49.7% | 50.3% |

A change in the extended Group management of the Zug Estates Group took place on 1 February 2022, when Irene Ganwisch joined the team and assumed the function of general hotel manager. The current management structure¹ can be found on the Zug Estates website.

New hires and employee turnover

GRI 401-1

| | 31 December 2022 | | |
|--|------------------|------------------|-------|
| | Real estate | Hotel & catering | Group |
| New hires during the year under review (number) | 7 | 61 | 68 |
| New hire rate | 14% | 63% | |
| Departures during the year under review (number) | 8 | 42 | 50 |
| Turnover rate | 16% | 43% | |

GRI 2-7 Employees

All employees work in the Canton of Zug. The figures are the number of people (not full-time equivalents) whom Zug Estates employs full-time or part-time on a temporary or permanent basis. All figures as at 31 December 2022.

Employees by employment contract

| | 31 December 2022 | | |
|---|------------------|------------------|------------|
| | Real estate | Hotel & catering | Group |
| Women, permanent | 16 | 62 | 78 |
| Women, fix-term | 1 | 5 | 6 |
| Men, permanent | 37 | 40 | 77 |
| Men, fix-term | 2 | 1 | 3 |
| Employees with non-guaranteed working hours | 0 | 0 | 0 |
| Total | 56 | 108 | 164 |

Full-time/part-time employees

| | 31 December 2022 | | |
|----------------|------------------|------------------|------------|
| | Real estate | Hotel & catering | Group |
| Women, >90% | 10 | 30 | 40 |
| Men, >90% | 34 | 36 | 70 |
| Women, 50%–90% | 6 | 23 | 29 |
| Men, 50%–90% | 4 | 2 | 6 |
| Women, <50% | 1 | 14 | 15 |
| Men, <50% | 1 | 3 | 4 |
| Total | 56 | 108 | 164 |

The turnover rate includes all departing permanent employees (no fix-term employment contracts) and is expressed as the ratio of the average headcount for the period, which reflects the mean number of employees at the start and at the end of the period. As Renggli Holding AG was not acquired until the fourth quarter of 2022, it is not included in the calculation of the turnover rate until 2023. The fluctuation rate by employee category and gender is not shown, as certain subsets are too small to be meaningful.

There have not been any mass redundancies at the Zug Estates Group in the past three years.

GRI 401-2

Company benefits for full-time employees not available to temporary workers or part-time employees.

Zug Estates attaches great importance to the equal treatment of all its employees. Accordingly, all company benefits are provided to both temporary workers and part-time employees. All full-time and part-time employees have statutory AHV (old-age and survivors') and IV (disability) insurance, are covered for accidents/illnesses, and are affiliated with a pension fund.

¹ <https://zugestates.ch/en/about-zug-estates#governance-structure>

Zug Estates AG offers several fringe benefits. These include commuter allowances of up to CHF 2 500, a mobile phone with a subscription for personal and business use, as well as anniversary gifts, for example. Several employee events are also held every year.

Health and safety

Analysis of events in recent years have shown that construction sites pose the greatest occupational safety hazards for Zug Estates Group. Zug Estates thus reviews compliance with SUVA standards and contractually obliges its construction site suppliers to comply with the currently valid work and safety regulations as laid out in the "General Conditions of Contract for Work and Services".

All incidents relating to occupational safety (by employees and third parties) are documented. In addition to describing the course of events, the measures taken are also described to prevent further incidents.

| Employees | 2022 | | |
|--|-------------|------------------|-------|
| | Real estate | Hotel & catering | Group |
| Fatal occupational accidents | 0 | 0 | 0 |
| Work-related injury with severe consequences (absence of more than three working days) | 0 | 1 | 1 |
| Documentable work-related injuries (minor accident with absence of up to three days). | | 1 | 1 |

| Suppliers | 2022 | | |
|--|-------------|------------------|-------|
| | Real estate | Hotel & catering | Group |
| Fatal occupational accidents | 0 | 0 | 0 |
| Work-related injury with severe consequences (absence of more than three working days) | 2 | 0 | 2 |
| Documentable work-related injuries (minor accident with absence of up to three days). | 0 | 0 | 0 |

Average hours of training per year per employee

GRI 404-1

| | 2022 | | |
|------------------|-------------|------------------|-------|
| | Real estate | Hotel & catering | Group |
| Average number | 11.6 | 2.9 | 5.6 |
| Per woman | 11.3 | 0.0 | 2.3 |
| Per man | 11.7 | 7.6 | 9.6 |
| Group management | 8.0 | 0.0 | 6.7 |
| Management | 13.0 | 2.8 | 9.4 |
| Employees | 12.0 | 3.1 | 5.2 |
| Trainees | 344.0 | 438.2 | 414.7 |

Percentage of employees with regular performance and professional development reviews

GRI 404-3

During the year 2022 under review, Zug Estates conducted performance reviews and discussed professional development options with 83% of its employees, regardless of gender, function or employment contract (real-estate: 100%, hotel & catering: 77%). 61 employees joined hotel & catering in 2022, and for some the review period was too short.

Ratio of base salary and remuneration of women to men

GRI 405-2

To prevent wage discrimination, Zug Estates conducted an equal pay analysis for the first time in 2020 using Logib, a tool provided by the federal government. The analysis did not reveal any significant gender-specific differences in wages. The analysis will be updated regularly to ensure that fair wages are paid to all employees at all times.

Incidents of discrimination and corrective actions taken

GRI 406-1

| | 2022 | | |
|----------------------------------|-------------|------------------|-------|
| | Real estate | Hotel & catering | Group |
| Complaints lodged | 0 | 0 | 0 |
| Cases with disciplinary measures | 0 | 0 | 0 |

Discrimination, harassment and exploitation of any kind are not tolerated. The Directive on the Protection of Personal Data and the Code of Conduct (<https://zugestates.ch/corporate-governance>) define clear standards and guidelines. A complaints process is in effect for reporting discrimination cases (see page 47).

GRI 2-8 *Workers without employee status*

Zug Estates AG had the following workers without employee status in the year 2022 under review:

| Positions | Number |
|--------------------------------------|--------|
| Apprentices | 2 |
| Pupil temps / summer jobs | 0.42 |
| Cleaners for the Zug Estates offices | 0.34 |
| External payroll accounting | 0.14 |
| External receptionists | 1 |

* The data was collected in full-time equivalents and as the average for the respective year under review.

The above categories of workers without employee status were identified by considering only those jobs that are under the direct control of Zug Estates. This includes work that is done either at the Zug Estates offices or externally and then sent to Zug Estates to review. There were no significant changes compared to the previous year.

4.2 Development of living spaces

Relevance

The real estate industry develops, realises and operates long-lasting buildings and sites that affect populations in towns and villages for generations to come. The development of living space and the design of buildings and spaces have a direct impact on the life and well-being of residents for very long periods and directly influence the environment. It is thus important to use an integrated approach when developing sites, spaces and neighbourhoods and to manage them sustainably with a view to creating attractive and lasting living environments for users and tenants.

Approach to the topic

Zug Estates creates attractive and sustainable living spaces by strongly emphasising social sustainability in all its construction projects. The following core areas and measures have emerged:

- We aim for a specific mix of uses and make ground-floor spaces attractive to the public so that our sites become diverse and appealing living spaces where people can satisfy many of their daily needs within walking distance.
- By creating exceptional outdoor spaces that provide users with a range of options, we boost the quality of their experiences and make our sites more attractive. For example, this includes gardens, a wide range of spaces for leisure activities and exercise and play, as well as carefully placed wet areas.
- We anticipate the future needs of tenants and customers through studies and meetings with experts and ensure that we can respond quickly and flexibly to changing requirements relating to building use and expansion, and for developing the necessary infrastructure.
- We use feedback and complaints from tenants and customers to continuously improve our sites and service quality and to thus raise customer satisfaction.
- We aim to offer a variety of apartment types and sizes. We promote social integration by offering a proportion of housing in the more affordable segments.

The Head of Development and Construction Projects and his team pursue these goals, together with external partners. Competitions involving juries of experts ensure that planning is of high quality. The aim is to continuously improve the liveability and sustainability of our sites so we can achieve our ultimate goal of providing high-quality living environments to different population segments. For Zug Estates, ensuring variety is a key element of creating attractive living spaces.

The plans to be approved by the authorities determine the conditions for the projects we develop. They define topics such as utilisation, building dimensions and use type, as well as various environmental aspects. The project development of the Metalli living space also involves a planning agreement with the authorities for the work that is planned.

Workshops were conducted with the landscape architects and the current groundsperson to refine the outdoor landscape design and ensure that visitors have

pleasant experiences at the Suurstoffi site. Within the scope of these efforts, important topics include biodiversity, heat management, ecological diversity, indigenous plants, optimised care, visually appealing design, and potential uses for residents. The project was realised in spring/summer 2023².

Enquiries to our management team and past tenant surveys have shown that there is increasing interest in topics such as e-mobility, bicycle parking spaces and services, as well as mobility as a service. For this reason, Zug Estates has decided to make the Suurstoffi site available as a laboratory for the SWEET (Swiss Energy research for the Energy Transition) programme funded by the Swiss Federal Office of Energy (SFOE). The SWICE (Sustainable Wellbeing for the Individual and the Collectivity in the Energy transition) consortium includes Lucerne School of Business (HSLU). In autumn 2022, HSLU conducted a large-scale tenant survey³ to identify room for improvement regarding new forms of work, mobility and energy. Based on the results, a focus group workshop⁴ was conducted. This showed that Suurstoffi residents are interested in various innovative mobility topics that can serve as intervention measures. In particular, the prioritisation indicated that bicycle infrastructure and especially the Mobility app, as well as carpooling, are options that could help the residents of Suurstoffi to choose more sustainable means of transport.

Results and evaluation

We conduct satisfaction surveys and review vacancy rates regularly to measure the success of our approach⁵. A visitor frequency measurement on the ground floor areas of the Metalli shopping centre also provides important insights into its attractiveness, use and further development. In future, how long visitors stay will also be measured.

Tenant survey

Zug Estates is currently evaluating a partner to conduct the next tenant satisfaction survey, which is to be carried out every two years across the entire portfolio starting in 2024. Besides the survey of the satis-

faction rate, the findings are to be used to devise further development measures to increase the attractiveness of the areas and raise user satisfaction.

Social integration

The Suurstoffi site has 74 affordable rooms for students. This number will increase to 96 rooms once work at the site has been completed.

160 apartments at the Suurstoffi site can be used as assisted living facilities for the elderly. In addition to a large selection of services (including housekeeping, ironing and laundry services), residents can also book options that include a 24/7 telephone and emergency hotline, alerts to emergency services, and the technical monitoring of emergency alert devices.

The Metalli living space (www.lebensraum-metalli.ch) project involves new city apartments in the centre of Zug, with layouts that meet the different needs of a modern, urban society. The mix also includes apartments in the affordable segment.

Access

The Metalli complex and the Suurstoffi site are traffic-free. Both Zug Estates sites are connected to public transport to the extent possible. All tenants can reach the train station, whether in Zug or Rotkreuz, within 10 minutes. Both train stations offer regular direct trains to Lucerne and Zurich as well as connections to other places in the region. The Metalli/Bahnhof Zug bus stop is served by seven bus lines operated by Zugerland Verkehrsbetriebe. At the Rotkreuz station, six bus lines provide access to the region.

Zug Estates contributed CHF 2.0 million to finance the footbridge at the Rotkreuz station to connect the Suurstoffi site directly to the train station. The footbridge was officially opened to the public in autumn 2019.

Accessibility by public transport is also a relevant criterion when deciding whether to acquire new sites.

² <https://zugestates.ch/stories/nichts-ist-so-stetig-wie-der-wandel>

³ https://zugestates.ch/assets/documents/Ergebnisbericht_Suurstoffi_2022.pdf

⁴ https://zugestates.ch/assets/documents/Zusammenfassung_Fokusgruppen_Workshop_Suurstoffi.pdf

⁵ https://zugestates.ch/assets/documents/Zug_Estates_Gesch%C3%A4ftsbericht_2022.pdf, S. 15

E-mobility

Our tenants have a growing need for e-mobility. Zug Estates is therefore promoting e-mobility by expanding the necessary infrastructure on its sites. All tenants of Zug Estates are offered the opportunity to have access to an e-parking space. See page 25 for more information about mobility.

The public e-vehicle charging stations at both sites are being expanded continuously. There were six charging stations, two of which with rapid charging, at the Metalli/City Centre site as at 31 December 2022. An additional 14 rapid charging stations will be provided in summer/autumn 2023. The Suurstoffi site has had two public charging stations since early August 2022, one of which for rapid charging.

Mobility as a Service (MaaS)

By supporting the Sorglos mobil (carefree mobility) project of PostAuto AG and Mobility Genossenschaft at the Suurstoffi site, Zug Estates is offering its support to a pilot project in the area of Mobility as a Service (MaaS). Sorglos mobil gives tenants access to an e-vehicle fleet – including bikes, cars and cargo bikes – right on their doorstep. Trips by public transport could be booked in addition. The pilot project ended as planned at the end of 2022. All participants were able to gain exciting insights for further projects⁶.

The Suurstoffi site has two Mobility locations. The centre of the site has had also a Mobility car-sharing location on Haldenstrasse since September 2022. Zug Estates employees can benefit from the offer.

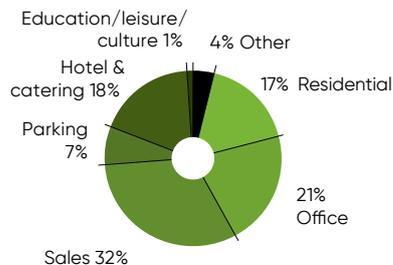
Bicycle parking

Many more bicycle parking spaces will be created with the Metalli living space development project in the centre of Zug.

Mix of uses

Use of the Metalli/City Center sites

Based on projected rental income^{1,2} as at 31 December 2022

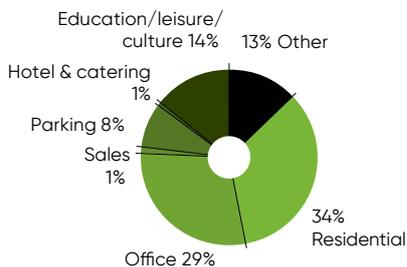


¹ Due proportion of market value and projected rental revenue for (co-owned) property at Baarerstrasse 20–22, Zug.

² From point of view of real estate business unit.

Suurstoffi site, Risch Rotkreuz

Based on projected rental revenue as at 31 December 2022



4.3 Connected communities

Relevance

Connected communities strengthen cooperation and cohesion within, promote the exchange of knowledge and are a source of innovation. Zug Estates is aware of this powerful market trend, especially when it comes to environmental issues. The transformation towards circular construction requires the cooperation of the various market players – contractors and suppliers, planners and licensing authorities, building owners – and open discussions about experiences and innovative approaches to solutions. Zug Estates actively contributes in this area. On the one hand, we offer platforms such as the Sustainability Forum; on the other hand, we support exciting projects and ideas financially or with personnel.

Connected communities contribute to our management approach when it comes to innovation by sharing ideas and resources and by jointly developing new solutions. Without our commitment in this area, there

⁶ <https://zugestates.ch/stories/spannende-erkenntnisse-f%C3%BCr-eine-m%C3%B6gliche-mobilit%C3%A4tswende>

is a risk of missing trends and local initiatives and of losing competitiveness and innovation.

Approach to the topic

Zug Estates focuses on facilitating connections among communities, tenants and users, industry players, as well as with colleges and universities.

Connection among tenants

Getting tenants to identify with the area and the neighbourhood more strongly and integrating them into the community will increase their satisfaction, something that should result in lower tenant turnover. The Zug Estates managers aim to help tenants connect by means of neighbourhood events (e.g. open days, tenant aperitifs or Christmas tree sales). The urban gardening project, which has been a success for years, offers opportunities for people to connect. We also use digitalisation as a way of connecting residents more closely: Thanks to our tenant app, tenants and users of the Suurstoffi site feel more closely connected to their neighbourhood.

Project development

When planning projects, Zug Estates considers the concerns of stakeholders such as tenants, authorities, politicians, the population and important interest groups. In the Metalli living space project, we involve these stakeholders when developing important issues by offering opportunities for discussion and feedback and by regularly informing them about relevant steps. To strengthen cooperation with the authorities, a planning agreement⁷ was signed with the City of Zug in 2019 that lays out the joint procedure in a binding manner.

Connection within the industry

In addition to getting tenants and users to connect, we also support knowledge exchange in the real estate industry. Zug Estates has been a role model in sustainable real estate development for many years now and has helped raise awareness among various industry players. The annual Sustainability Forum, organised by the Sustainability core team, promotes knowledge exchange in the real estate industry and provides access to current industry topics. Following the Sustainability Forum on 6 September 2023, we will conduct a satisfaction survey for the first time.

Furthermore, our employees participate in courses and industry events as opportunities to more firmly incorporate sustainability approaches within the industry.

Exchange with education partners

Zug Estates also participates in knowledge exchanges between researchers and industry partners by supporting Switzerland Innovation Park Central, which has its premises on the Suurstoffi site. Zug Estates is a core member of the Innovation Park and collaborates closely with it and other members on a range of research projects.

For several years now, Zug Estates has been a sponsor of the Swiss Building Forum, which has become a popular industry event. It is hosted by Lucerne University of Applied Sciences and Arts in collaboration with the Sustainable Construction Network Switzerland (NNBS). Group management evaluates and approves all sponsorship requests.

Zug Estates is involved in the SWICE project ("Sweet" development programme⁸), which is run by ZHAW (lead) and HSLU. The SWICE project aims to identify and quantify the energy saving potential and opportunities for improved quality of life that may arise from future urban scenarios with new models for living and working, with changing leisure and mobility behaviour, and with various business models. Details about the project and the first results are in the chapter on living space development (from page 39).

Results and evaluation

Zug Estates held its seventh Sustainability Forum in September 2022⁹. Over 200 guests from business, government and science attended the event at Lucerne University of Applied Sciences and Arts' Audi Max space on the Suurstoffi site. Speakers included Prof. Dr. Werner Sobek, Stefan Marbach from Herzog & De Meuron; and Peter Wicki, Head of Project Development at Zug Estates AG. The visitor numbers, which have been rising for years, show that the forum has grown into a popular venue and that Zug Estates is on the right track. We will publish the results of the satisfaction survey in the next report.

⁷ https://assets.website-files.com/62b472a2843f074c8d0dd63c/62fba6bda8ca0515f72b276b_190822_Zug_Estates_Medienmitteilung.pdf

⁸ <https://www.bfe.admin.ch/bfe/de/home/forschung-und-cleantech/foerderprogramm-sweet.html>

⁹ www.zugestates.ch/nachhaltigkeitsforum

Zug Estates enables employees to become involved in further education, in consultation with their line manager. Two employees of Zug Estates teach at vocational schools and universities.

In 2022, Zug Estates employees spent the following number of hours to support students.

- Collaboration on research projects with participation by colleges or universities: 32 hrs
- Supervision of students' work (BA and MA theses): 90 hrs

At the end of the year 2022 reporting year, in 77% (previous year: 76%) of the apartments on the Suurstoffi site at least one person per household had installed the tenant app. Our goal is to continuously increase this figure and to be able to reach all tenants via the app.

GRI 413-1 Operations with local community engagement, impact assessments and development programmes

All operating sites (100%) are locally integrated. We have regular contact with local authorities and political bodies at both of our locations. By sponsoring local events and associations, Zug Estates Group is also involved in social activities.

The project managers intend to involve residents of the city of Zug in the Metalli living space project. Zug Estates aims to promote dialogue with Zug residents through exhibitions on the phases, with regular publications and via the lebensraum-metalli.ch website. In 2022, meetings were held with various stakeholders such as neighbourhood associations, the heritage protection, IG Metalli and the authorities. Tenants are regularly informed about the current planning status by letter. Thanks to these measures, the most important stakeholder groups know about the Metalli living space project. A survey conducted by an independent institute in October 2022 found that 88% of respondents think the Metalli living space concept as presented is "appealing" or "very appealing". For Zug Estates, this is a clear indication that the participatory partnership approach is working¹⁰. These efforts help us to better align the site's development with the overall development of the city of Zug and gear it toward the needs of both its users and the local population.

¹⁰ <https://www.lebensraum-metalli.ch/storie/die-bevolkerung-bringt-sich-ein>

Share of expenditures for local suppliers

GRI 204-1

In the year 2022 under review, some 0.99% of our spending was in foreign currencies or in foreign countries, which clearly shows that nearly all our business is conducted in Switzerland and only a fraction of our investments flow into other countries.

Membership in associations and interest groups

GRI 2-28

Zug Estates Holding AG and its subsidiaries are members of various associations and interest groups: Swiss Vocational Education and Training Fund, Reuse-Oriented Construction Charter, ERFA Elektro Industrie Zentralschweiz, Trade Association of the City of Zug, Trade Association of Risch Rotkreuz, Zugerland Homeowners' Association, Hotelierverein Zugerland, Hotellerie Suisse, Interessengemeinschaft Metalli, Madaster Switzerland, Organisation kaufmännische Grundbildung Treuhand/Immobilien (OKGT), Swiss Society for Sustainable Real Estate Management, Swiss Tourism Federation, SIX Verband der Immobilienwirtschaft (SVIT) Zentralschweiz, Swiss Circle, Swiss Council Community (SCC), Innovation Park Association Central Switzerland, Zug International Business Forum (ZIBF), Zug Tourism, Zug Chamber of Commerce

5. Governance topics

5.1 Transparent communication

Relevance

Our company is committed to the key objectives of creating and maintaining trust and ensuring credibility. In this regard, corporate communication plays an important role. Communication principles such as relevance, timeliness and completeness of information must take into account the range of requirements and needs of or stakeholders. Interacting with partners listed on the stock market makes it necessary to observe a large number of rules, and non-compliance with them can lead to a loss of confidence and image among investors or to sanctions by the Swiss stock exchange.

Approach to the topic

We communicate transparently by sending clear messages geared to the various target groups and levels and by using a range of channels. We pursue an open communication strategy to ensure that all target groups are treated equally.

Zug Estates informs its investors in a transparent and trustworthy manner. When communicating, we focus on the essentials and inform in good time. Our information style is objective and aimed at long-term investors. We answer questions and provide information to investors at the Annual General Meeting and during the year via ir@zugestates.ch. However, the rules for equal treatment take precedence in every case.

In addition, we exchange information with our analysts proactively. To this end, our managers participate in annual roadshows, and Zug Estates conducts property tours of its sites at regular intervals. We aim for an analyst assessment that reflects our medium- to long-term growth potential.

We pay particular attention to compliance with the directive on ad hoc publicity¹. To this end, Zug Estates prepared internal regulations on publication obligations and the disclosure of management transactions. Zug Estates publishes an annual Sustainability Report in accordance with GRI Standards as well as a green bond report. Zug Estates exchanges information with ESG rating agencies regularly and informs them in writing of any significant changes.

Moreover, Zug Estates discloses financial support from the public sector as well as party donations.

We are in contact with our tenants through our property management activities and inform them of any changes in good time via our website, postings, or directly by email or letter. At the Suurstoffi site, we also use a tenant app that simplifies communication with tenants. Through regular and timely information, we increase the acceptance of measures and can respond to tenant feedback in good time. We continuously evaluate ways of improving digital communications with tenants.

Our employees can assess internal communication in the employee survey conducted regularly (the next one is planned for the first half of 2024). Here, we aim to achieve a "good" to "very good" rating (see chapter Attractive working environment). Since 2020, we have been holding monthly information events for our employees where representatives of the Group management, executive management and employees explain current developments and progress in projects, and where there are opportunities to ask questions. Zug Estates holds at least ten employee information events per year.

Green bond report

Zug Estates has issued two green bonds. The specifications of the green bond require Zug Estates to prepare regular reports, not only with descriptions of how the funds are used but also about the impact these funds have on nature and the environment. Key figures are prepared and analysed by Amstein + Walthert AG, Zurich. The reports² can be found on the Zug Estates website.

¹ <https://www.ser-ag.com/dam/downloads/regulation/listing/directives/dah-en.pdf>

² <https://zugestates.ch/en/stories/green-bond-reporting>

Results and evaluation

GRI 201-4

Financial assistance from public sources

The population and government plays close attention to how funds from public sources are used. For reasons of transparency and credibility, we disclose such payments. We received CHF 122 000 in short-time compensation for our hotels in 2022 in connection with the COVID-19 pandemic (previous year: TCHF 744). Zug Estates also received TCHF 65 in energy subsidies (previous year: TCHF 144). The

rules regarding these subsidies are the same for all market participants.

Zug Estates did not receive any other funds (including tax relief and credits, subsidies, grants, premiums, licence exemptions, export credit guarantees, or other financial incentives) in the 2022 financial year.

Political contributions

GRI 415-1

We did not make or receive any political contributions during the year under review.

GRI 2-29

Approach to stakeholder engagement

| Main target group | Frequency of contact | Type of contact | Group's most important concerns |
|-----------------------------------|----------------------|---|---|
| Shareholders and investors | Regularly | <ul style="list-style-type: none"> - General shareholder meeting - Reporting - Media release - Website - Webcast | <ul style="list-style-type: none"> - Secure investment - Attractive share price performance - Stable dividend ratio - Participation rights - Responsible corporate governance |
| Analysts | Regularly | <ul style="list-style-type: none"> - Reporting - Roadshows - Email/phone - Sustainability Forum - Property tour | <ul style="list-style-type: none"> - Complete, transparent reporting - Company's development potential - Insight into the corporate strategy - Responsible corporate governance |
| Tenants | As needed | <ul style="list-style-type: none"> - Tenant app (Suurstoffi) - Letter/postings - Email/phone - Website | <ul style="list-style-type: none"> - Information about changes - Simple contact - Swift processing of enquiries - Simple, transparent billing |
| Media | As needed | <ul style="list-style-type: none"> - Media releases - Email/phone | <ul style="list-style-type: none"> - News about construction projects - Short response times - Newsworthy notices |
| Employees | Frequently | <ul style="list-style-type: none"> - Events - Email - Surveys - Monthly information event (in-person or online) - Intranet | <ul style="list-style-type: none"> - Further development opportunities - Transparent and open communication - Innovative and sustainable employer - Flexible and autonomous scheduling - Open and personal corporate culture |
| The public and the Zug population | As needed | <ul style="list-style-type: none"> - Exhibitions (Metalli) - Website - Social media | <ul style="list-style-type: none"> - Living spaces that add value for the general public - Right of participation in construction projects - Regular progress reports / information about planning |
| Authorities and politicians | Regularly | <ul style="list-style-type: none"> - Sustainability Forum - Meetings - Email/phone/post | <ul style="list-style-type: none"> - Cooperative partnership for further development - Urban development in line with Zug's cityscape - Public involvement on construction projects (participation) - Harmonising different interests |
| Business partners and suppliers | As needed | <ul style="list-style-type: none"> - Sustainability Forum - Email/phone | <ul style="list-style-type: none"> - Long-term collaboration at financially attractive terms |

5.2 Responsible corporate governance

Relevance

GRI 2-23 Zug Estates develops responsible corporate governance through adherence to its corporate principles and values. This also means that Zug Estates prioritises long-term profitability over short-term profit. As a listed real estate company in Switzerland, our actions must uphold human rights and show consideration for the environment. The company attaches great importance to ethical principles, values and behaviour in its day-to-day business dealings with all its stakeholders, and it expects this behaviour from its suppliers and business partners.

Corruption, insider trading, breaches of regulatory requirements and violations of personal privacy or personal integrity both harm the company financially and damage its reputation. They are not tolerated and are to be condemned in any form.

Approach to the topic

GRI 2-23 To ensure responsible corporate governance, Zug Estates has regulations, policies and directives, and its processes in all the relevant business areas are based on these.

GRI 2-23 Zug Estates complies with laws, regulations, directives and standards. Employees at all levels must comply with these standards as called for by the specific tasks. Relevant changes in the regulatory environment are monitored continuously to enable a timely response.

Employees are informed about new regulations or significant changes in them by their direct supervisors, email or at a monthly employee event. External employees are informed about the ethical principles at Zug Estates by the human resources department or line manager; suppliers and business partners are informed about any contracts for work or services to be signed and about the Code of Conduct for Suppliers, which is an integral part of the contract.

Statement on human rights observation

Zug Estates respects fundamental and universally applicable human rights. The related "Policy statement regarding respect for and the observation of human rights"³ of June 2023 considers, in particular, suppliers and the upstream value chain, but also employees and customers.

Code of Conduct

The company's principles and values are laid out in the Code of Conduct⁴, which describes and governs the company's courses of action. Zug Estates communicates its corporate values and principles clearly and comprehensibly to its employees. The Code of Conduct is part of the Personnel Policy and thus an integral part of all employment contracts. The Code of Conduct is available to all employees through an internal knowledge database. The compliance officer is responsible for providing information on the guidelines and for ensuring compliance with them. Steps must be taken to verify any suspected violation. Depending on the case, this can involve the direct line manager, the compliance officer, or the HR department. Serious violations will result in disciplinary measures.

Code of Conduct for Suppliers

The Code of Conduct for Suppliers⁵ has been an integral part of all new contracts since 1 August 2023. We expect our business partners to observe the same ethical principles, actively advocate responsible action, and to be committed to fair, respectful and compliant conduct within the company and toward all our stakeholder groups.

Corruption prevention: Policy for handling gifts and invitations

One measure enacted in an effort to prevent corruption is a clear policy concerning gifts and invitations (Policy on Handling Gifts and Invitations (anti-corrup-

³ <https://zugestates.ch/assets/documents/Policy-statement-regarding-respect-for-and-the-observation-of-human-rights.pdf>

⁴ <https://zugestates.ch/en/corporate-governance>

⁵ <https://zugestates.ch/assets/documents/Supplier-Code-of-Conduct.pdf>

tion)). The policy aims to preserve the integrity of the company's employees as well as of business partners and others associated with Zug Estates. This policy is summarised in the chart below:



Insider trading

Insider information refers to confidential content whose disclosure would significantly affect the prices of securities of a company listed on the stock exchange (Art. 2j Financial Markets Infrastructure Act (FMIA)). Information has a significant effect on the price of securities if it is likely that an investor would consider such information when making an investment decision (to purchase, sell or hold the corresponding securities) if they had knowledge of it.

The members of the Board of Directors, the company's Group management, subsidiaries of Zug Estates Holding, as well as other employees of Zug Estates have knowledge about insider information. The Securities and Insider Trading Policy prohibits insider trading, describes the duty of confidentiality, and lists potential sanctions in case of violations. The defined blackout periods for shares trading are shown in the Annual Report 2022 (page 36).

Companies that can access confidential information by virtue of their activities with Zug Estates can be considered insiders within the meaning of the Financial Market Infrastructure Act (FMIA). Zug Estates uses a non-disclosure agreement to govern the handling of confidential information with external partners. Furthermore, organisational, technical and procedur-

al measures are in effect to ensure the confidentiality of the information.

Conflicts of interest

Resolutions and elections to the Board of Directors are decided by an absolute majority of votes. Pursuant to Art. 16 of the company's articles of association⁶, the chairperson has the casting vote in the event of a tie. Voting and elections are conducted by a show of hands. Members of the Board of Directors and Group management are not permitted to do anything that conflicts with the interests of Zug Estates Holding AG or a Group company or that could be construed as such. They must therefore, of their own accord or at the request of the Board of Directors, recuse themselves when business affecting their personal interests or of natural persons or legal entities close to them is being conducted. Members of the Board of Directors and Group management must disclose potential conflicts of interest completely and without delay. The other activities by all members of the Board of Directors – in particular in other management and supervisory bodies, official functions, or political offices – are publicly available⁷. Members of the Board of Directors are not permitted to have significant business relationships with Zug Estates Holding AG or the Zug Estates Group.

GRI 2-15

The chairperson of the Board of Directors is the head of the highest governance body but does not have any management function within the Zug Estates Group.

GRI 2-15

Zug Estates has disclosed the most important shareholders and their holdings (see Annual Report 2022, p. 64).

Complaints procedure

General

Zug Estates cultivates an open and transparent corporate culture. Complaints, concerns or negative effects can be submitted directly by email (info@zug-estates.ch) or by using the online contact form⁸. Stakeholders can communicate sensitive issues to management or the Board of Directors or Group management or raise them at the annual general meeting. Complex cases with strong implications must be discussed at management and Board-meetings.

GRI 2-25

⁶ https://zugestates.ch/assets/documents/211130_Organisational_regulations_Zug_Estates_Holding_AG.pdf

⁷ Annual Report 2022, pages 28 and 29

⁸ <https://zugestates.ch/en/contact>

ENQUIRE Rechtsanwälte AG, an external whistleblowing reporting office, is available to Zug Estates Group employees and to suppliers and third parties. It ensures that the person submitting the notification remains anonymous to Zug Estates. ENQUIRE reports to Group management on request. The Board of Directors is consulted if there is any suspicion that Group management is involved. ENQUIRE is mandated to clarify the circumstances of the notifications and can be asked to participate in enquiries. The contact details of ENQUIRE are on the corporate website.⁹

GRI 2-16

Group management is responsible for periodic reports to the Board of Directors and for providing information about extraordinary events immediately or in the case of increased risks in connection with the operating activities. Its tasks are laid out in the Organisational Regulations.¹⁰

Employees

Employees of the Zug Estates Group must report any violation of the regulations or guidelines of which they are aware as well as any attempted or actual violations. Each complaint is treated confidentially and investigated. Complaints will be passed on to the appropriate person or, in more serious cases, to a manager or Group management member.

Employees of the Zug Estates Group must report even suspected violations. Such reports will be treated anonymously on request. The person submitting a justified report will not be penalised in any way.

The following contacts are available within the Zug Estates Group:

- The direct or next higher line manager
- Compliance officer
- Chair of the Audit Committee of Zug Estates Holding AG.

Any retaliation against employees who report incidents in good faith is prohibited. The offices responsible for handling the complaints will protect the rights of the person being accused.

Employees have the opportunity to give feedback on the complaint procedure to their direct supervisors or to the compliance unit and to make suggestions for improvement.

⁹ <https://zugestates.ch/en/corporate-governance>

¹⁰ https://zugestates.ch/assets/documents/211130_Organisation-al_regulations_Zug_Estates_Holding_AG.pdf

Tenants

Tenant complaints go directly to the property managers responsible, who record and respond to them and, if necessary, take measures to address the problem. In case of a serious complaint, the line managers or Group management are involved. This process is reviewed with the help of a regular tenant survey.

Procedure for obtaining advice and reporting concerns

Individuals can use the website's contact form or a personal contact for getting advice about implementing the policies and for submitting their concerns about business conduct. The Sustainability core team and the compliance officers are available to answer questions and assist all employees. All stakeholders can use the external contact for issues that call for anonymity.

GRI 2-26

Expenses

Board of Directors, Group management and employees are reimbursed for all business-related expenses. Such expenses must be approved by the line manager and are subject to random compliance checks by HR. Depending on their level, members of Group management and senior management are not permitted to submit small expenses up to a certain limit but in return are reimbursed through a monthly lump-sum amount for expenses as stipulated in the policy. The expenses regulations were reviewed and approved by the Tax Administration of the Canton of Zug.

Election criteria for the highest governance body

When selecting a new member of the Board of Directors, it must be ensured, among other things, that the Board as a whole adequately covers all defined core competencies¹¹ and that the defined diversity criteria (see chapter Attractive working environment) are met. More information about the election and term of office can be found in the Annual Report 2022 of Zug Estates Holding AG on page 30.

GRI 2-10

¹¹ https://zugestates.ch/assets/documents/Zug_Estates_Annual_Report_2022.pdf, Seite 30

Assessment of the performance of the highest governance body

GRI 2-18

The Board of Directors self-assesses the competencies of its members. These competencies form the starting point for aligning the required and the current responsibilities within the Board as a whole. If the analysis indicates that certain competencies are insufficiently represented or missing within the board, this will be taken into account the next time a new member is selected.

Contact for questions about the report

GRI 2-2

Zug Estates Holding AG, Philipp Hodel, Head of Communications, Industriestrasse 12, CH-6300 Zug, ir@zugestates.ch, +41 41 729 10 10 (head office)

This Sustainability Report has the same scope of consolidation as the financial report. Deviations are marked and justified at the appropriate places in this report in accordance with GRI Standards.

Results and evaluation

GRI 205-3

Confirmed incidents of corruption and actions taken

No cases of corruption were recorded at Zug Estates during the year under review.

Corrected and revised information

GRI 2-4

The revised sections of the report are marked.

GRI 2-27

Compliance with laws and ordinances

There were no significant violations of laws and ordinances during the reporting period.

External audit

GRI 2-5

Zug Estates has not used an external auditor to verify the information and data in its sustainability reporting. The Board of Directors has been informed of this decision and has studied and approved this report.

About this report

GRI 2-18

Reporting period, report frequency and contact

Zug Estates Holding AG has released this report of 25 August 2023 for the period from 1 January 2022 until 31 December 2022 in accordance with the GRI Standards 2021. This is the same period as for the financial report. Financial figures were calculated in accordance with Swiss GAAP FEER, Art. 17 of the Directive on Financial Reporting of the SIX Swiss Exchange and statutory provisions. The environmental key figures were obtained via the Greenhouse Gas Protocol. Key figures relating to energy and water refer to the period from 1 April 2022 until 31 March 2023, as declared in the relevant places. Zug Estates reports annually on its sustainability topics. The most recent report was published on 24 August 2022.

Organisational profile

GRI 2-1

Legal name: Zug Estates Holding AG

Legal form: Zug Estates Holding AG is listed on the SIX Swiss Exchange, Zurich (securities number: 14 805 212, ticker symbol: ZUGN)

Location of the head office: Zug Estates Holding AG, Industriestrasse 12, CH-6300 Zug

Countries in which Zug Estates Holding AG operates: Switzerland

6. GRI Index



CONTENT INDEX ESSENTIALS SERVICE

2023

For the Service Content Index Essentials, GRI Services verified that the GRI Index is presented clearly and in accordance with the Standards and that the references for statements 2-1 to 2-5, 3-1 and 3-2 are consistent with the relevant sections in the report's body. This service was provided for the German version of the report.

| Statement of use | Zug Estates Holding AG has reported in accordance with the GRI Standards for the period from 1 January 2022 to 31 December 2022. | | |
|---|--|---|---|
| GRI used | GRI 1: Foundation 2021 | | |
| GRI Standard | Disclosure | Place | Further disclosures and omissions |
| GENERAL DISCLOSURES | | | |
| The organisation and its reporting practices | | | |
| GRI 2: General disclosures 2021 | 2-1 | Organisational details | p. 8, 48 |
| | 2-2 | Entities included in the organisation's sustainability reporting | p. 48 |
| | 2-3 | Reporting period, frequency and contact point | p. 48 |
| | 2-4 | Restatements of information | p. 48 |
| | 2-5 | External assurance | p. 48 |
| Activities and workers | | | |
| GRI 2: General disclosures 2021 | 2-6 | Activities, value chain and other business relationships | p. 9 |
| | 2-7 | Employees | p. 36 In the chapter on attractive working environment |
| | 2-8 | Workers who are not employees | p. 38 In the chapter on attractive working environment |
| Corporate governance | | | |
| GRI 2: General disclosures 2021 | 2-9 | Governance structure and composition | Annual Report p. 27-31 |
| | 2-10 | Nomination and selection of the highest governance body | p. 47-48 |
| | 2-11 | Chair of the highest governance body | p. 46, Annual Report p. 29 et seq. |
| | 2-12 | Role of the highest governance body in overseeing the management of impacts | p. 16 |
| | 2-13 | Delegation of responsibility for managing impacts | p. 13 |
| | 2-14 | Role of the highest governance body in sustainability reporting | p. 13 |
| | 2-15 | Conflicts of interest | p. 46 |
| | 2-16 | Communication of critical concerns | p. 47 |

| GRI Standard | Disclosure | Place | Further disclosures and omissions |
|---|------------|---|-----------------------------------|
| | 2-17 | Collective knowledge of the highest governance body | p. 13 |
| | 2-18 | Evaluation of the performance of the highest governance body | p. 48 |
| | 2-19 | Remuneration policies | Annual Report p. 38–41 |
| | 2-20 | Process to determine remuneration | Annual Report p. 38–41 |
| | 2-21 | Annual total compensation ratio | p. 34 |
| Strategy, policies and practices | | | |
| GRI 2: General disclosures 2021 | 2-22 | Statement on sustainable development strategy | p. 3 |
| | 2-23 | Policy commitments | p. 45 |
| | 2-24 | Embedding policy commitments | p. 45 |
| | 2-25 | Processes to remediate negative impacts | p. 47 |
| | 2-26 | Mechanisms for seeking advice and raising concerns | p. 47 |
| | 2-27 | Compliance with laws and regulations | p. 48 |
| | 2-28 | Membership in associations and interest groups | p. 42 |
| | 2-29 | Approach to stakeholder engagement | p. 12, p. 44 |
| | 2-30 | Collective bargaining agreements | p. 33 |
| MATERIAL TOPICS | | | |
| GRI 3: Material topics 2021 | 3-1 | Process of determining material topics | p. 10–11 |
| | 3-2 | List of material topics | p. 11 |
| Innovation | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 15–16 |
| Own indicator | | Greenhouse gas emissions per square metre of energy reference area in the portfolio | p. 15 |
| Business success | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 16–18 |
| GRI 201: Economic performance 2016 | 201-1 | Direct economic value generated and distributed | p. 18, Annual Report p. 74–75 |
| | 201-2 | Financial implications and other risks and opportunities related to climate change | p. 18 |
| Biodiversity | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 19–20 |
| Own indicator | | Proportion of certified area with a special ecological value | p. 19 |

| GRI Standard | Disclosure | Place | Further disclosures and omissions |
|---|--|--|-----------------------------------|
| Energy and emissions | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 20–28 |
| GRI 305: Emissions 2016 | 305-1 | Direct GHG emissions (Scope 1) | p. 27 |
| | 305-2 | Energy indirect GHG emissions (Scope 2) | p. 27 |
| | 305-3 | Other indirect GHG emissions (Scope 2) | p. 27 |
| | 305-4 | GHG emissions intensity | p. 27 |
| GRI 302: Energy 2016 | 302-1 | Energy consumption within the organisation | p. 26 |
| | 302-3 | Energy intensity | p. 22, 26 |
| Materials | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 29–30 |
| Own indicator | Percentage of lettable area of total space in wooden buildings | | p. 30 |
| Water | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 31–32 |
| GRI 303: Water and effluents 2018 | 303-1 | Water as a shared resource | p. 32 |
| | 303-2 | Managing the effects of water recirculation | p. 32 |
| | 303-3 | Water use | p. 32 |
| Attractive working environment | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 33–38 |
| GRI 401: Employment 2016 | 401-1 | New employee hires and employee turnover | p. 36 |
| | 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | p. 36 |
| GRI 403: Occupational health and safety 2018 | 403-9 | Work-related injuries | p. 37 |
| GRI 404: Training and further education 2016 | 404-1 | Average hours of training and further education per employee per year | p. 37 |
| | 404-3 | Percentage of employees receiving regular performance and career development reviews | p. 37 |
| GRI 405: Diversity and equal opportunity 2016 | 405-1 | Diversity of governance bodies and employees | p. 36 |
| | 405-2 | Ratio of basic salary and remuneration of women to men | p. 37 |
| GRI 406: Non-discrimination 2016 | 406-1 | Cases of discrimination and subsequent measures taken | p. 37 |

| GRI Standard | Disclosure | Place | Further disclosures and omissions |
|---|-------------|--|-----------------------------------|
| Development of living spaces | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 38–41 |
| Own indicator | Mix of uses | | p. 40 |
| Connected communities | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 40–42 |
| GRI 413: Local communities 2016 | 413-1 | Operations with local community engagement, impact assessments, and development programmes | p. 42–43 |
| GRI 204: Procurement practices 2016 | 204-1 | Share of expenditures for local suppliers | p. 42 |
| Transparent communication | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 44–45 |
| GRI 201: Economic performance 2016 | 201-4 | Financial assistance from public sources | p. 44–45 |
| GRI 415: Political influence 2016 | 415-1 | Party donations | p. 44 |
| Responsible corporate governance | | | |
| GRI 3: Material topics 2021 | 3-3 | Management of material topics | p. 46–49 |
| GRI 205: Anti-corruption 2016 | 205-3 | Confirmed corruption cases and measures taken | p. 48 |

7. Appendix

This data is always reported from 1 April to 31 March of the subsequent year.

Energy efficiency by building use type

| | Unit | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--------------------|--------|--------|--------|--------|--------|--------|--------|
| Energy efficiency and energy intensity | | | | | | | | |
| Commercial | | | | | | | | |
| Final energy requirement | GWh | 7.14 | 7.03 | 6.44 | 6.61 | 6.37 | 6.80 | 7.24 |
| Energy reference area | m ² | 46 404 | 46 404 | 46 404 | 46 927 | 50 001 | 50 001 | 50 001 |
| Energy demand / energy reference area | kWh/m ² | 153.8 | 151.5 | 138.7 | 140.8 | 127.5 | 136.0 | 144.7 |
| Office | | | | | | | | |
| Final energy requirement | GWh | 2.53 | 2.46 | 2.36 | 2.54 | 3.00 | 2.83 | 3.60 |
| Energy reference area | m ² | 30 609 | 30 609 | 38 399 | 47 394 | 73 678 | 73 678 | 78 367 |
| Energy demand / energy reference area | kWh/m ² | 82.6 | 80.5 | 61.6 | 53.6 | 40.8 | 38.4 | 45.9 |
| Residential | | | | | | | | |
| Final energy requirement | GWh | 4.74 | 4.74 | 4.80 | 5.03 | 4.04 | 3.78 | 4.11 |
| Energy reference area | m ² | 60 972 | 60 972 | 78 951 | 78 951 | 77 534 | 77 534 | 86 225 |
| Energy demand / energy reference area | kWh/m ² | 77.7 | 77.7 | 60.8 | 63.7 | 52.1 | 48.7 | 47.7 |
| Other | | | | | | | | |
| Final energy requirement | GWh | 1.60 | 1.58 | 1.54 | 1.61 | 1.67 | 1.94 | 2.68 |
| Energy reference area | m ² | 24 087 | 24 087 | 28 282 | 29 223 | 49 196 | 49 196 | 56 915 |
| Energy demand / energy reference area | kWh/m ² | 66.3 | 65.8 | 54.4 | 55.0 | 33.9 | 39.4 | 47.2 |

This chart includes all types of energy (see the table showing energy intensity on page 27)

Emissions by building use type (market-based)

| | Unit | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------------------------------|-------------------|--------|--------|--------|--------|--------|--------|--------|
| GHG emissions intensity | | | | | | | | |
| Commercial | | | | | | | | |
| Greenhouse gas emissions | t | 694.2 | 658.1 | 558.9 | 622.5 | 127.8 | 95.1 | 16.4 |
| Energy reference area | m ² | 46 404 | 46 404 | 46 404 | 46 927 | 50 001 | 50 001 | 50 001 |
| GHG emissions / energy reference area | kg/m ² | 15.0 | 14.2 | 12.0 | 13.3 | 2.6 | 1.9 | 0.3 |
| Office | | | | | | | | |
| Greenhouse gas emissions | t | 263.1 | 242.5 | 203.0 | 231.9 | 14.0 | 0.1 | 62.1 |
| Energy reference area | m ² | 30 609 | 30 609 | 38 399 | 47 394 | 73 678 | 73 678 | 78 367 |
| GHG emissions / energy reference area | kg/m ² | 8.6 | 7.9 | 5.3 | 4.9 | 0.2 | 0.0 | 0.8 |
| Residential | | | | | | | | |
| Greenhouse gas emissions | t | 420.2 | 407.2 | 373.5 | 404.7 | 282.0 | 116.9 | 79.7 |
| Energy reference area | m ² | 60 972 | 60 972 | 78 951 | 78 951 | 77 534 | 77 534 | 86 225 |
| GHG emissions / energy reference area | kg/m ² | 6.9 | 6.7 | 4.7 | 5.1 | 3.6 | 1.5 | 0.9 |
| Other | | | | | | | | |
| Greenhouse gas emissions | t | 122.1 | 114.6 | 97.5 | 109.6 | 21.4 | 8.0 | 97.2 |
| Energy reference area | m ² | 24 087 | 24 087 | 28 282 | 29 223 | 49 196 | 49 196 | 59 915 |
| GHG emissions / energy reference area | kg/m ² | 5.1 | 4.8 | 3.4 | 3.7 | 0.4 | 0.2 | 1.7 |

Emissions by building use type (location-based)

| | Unit | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---------------------------------------|-------------------|------|------|------|------|--------|--------|--------|
| GHG emissions intensity | | | | | | | | |
| Commercial use | | | | | | | | |
| Greenhouse gas emissions | t | | | | | 163.1 | 124.5 | 21.7 |
| Energy reference area | m ² | | | | | 50 001 | 50 001 | 50 001 |
| GHG emissions / energy reference area | kg/m ² | | | | | 3.3 | 2.5 | 0.4 |
| Office | | | | | | | | |
| Greenhouse gas emissions | t | | | | | 37.1 | 17.7 | 65.7 |
| Energy reference area | m ² | | | | | 73 678 | 73 678 | 78 367 |
| GHG emissions / energy reference area | kg/m ² | | | | | 0.5 | 0.2 | 0.8 |
| Residential use | | | | | | | | |
| Greenhouse gas emissions | t | | | | | 309.4 | 115.8 | 84.4 |
| Energy reference area | m ² | | | | | 77 534 | 77 534 | 86 225 |
| GHG emissions / energy reference area | kg/m ² | | | | | 4.0 | 1.5 | 1.0 |
| Other | | | | | | | | |
| Greenhouse gas emissions | t | | | | | 34.4 | 20.7 | 100.2 |
| Energy reference area | m ² | | | | | 49 196 | 49 196 | 56 915 |
| GHG emissions / energy reference area | kg/m ² | | | | | 0.7 | 0.4 | 1.8 |

Water efficiency by building use type

| | Unit | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------------------|--------|--------|--------|--------|--------|--------|--------|
| Efficiency of water use | | | | | | | | |
| Commercial use | | | | | | | | |
| Water consumption | m ³ | 37 002 | 36 368 | 39 250 | 36 954 | 28 869 | 29 748 | 36 119 |
| Energy reference area | m ² | 46 404 | 46 404 | 46 404 | 46 927 | 50 001 | 50 001 | 50 001 |
| Water consumption / energy reference area | l/m ² | 797.4 | 783.7 | 845.8 | 787.5 | 577.4 | 595.0 | 722.4 |
| Office | | | | | | | | |
| Water consumption | m ³ | 19 409 | 18 786 | 25 933 | 26 123 | 25 480 | 26 308 | 31 198 |
| Energy reference area | m ² | 30 609 | 30 609 | 38 399 | 47 394 | 73 678 | 73 678 | 78 367 |
| Water consumption / energy reference area | l/m ² | 634.1 | 613.7 | 675.4 | 551.2 | 345.8 | 357.1 | 398.1 |
| Residential | | | | | | | | |
| Water consumption | m ³ | 56 095 | 49 417 | 59 283 | 60 352 | 61 188 | 56 848 | 59 684 |
| Energy reference area | m ² | 60 972 | 60 972 | 78 951 | 78 951 | 77 534 | 77 534 | 86 225 |
| Water consumption / energy reference area | l/m ² | 920.0 | 810.5 | 750.9 | 764.4 | 789.2 | 733.2 | 692.2 |
| Other | | | | | | | | |
| Water consumption | m ³ | 15 588 | 15 135 | 18 422 | 17 422 | 18 599 | 18 593 | 23 349 |
| Energy reference area | m ² | 24 087 | 24 087 | 28 282 | 29 223 | 49 196 | 49 196 | 56 915 |
| Water consumption / energy reference area | l/m ² | 647.2 | 628.3 | 651.4 | 596.2 | 378.1 | 377.9 | 410.2 |

