

SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Green Bond Framework

Zug Estates Holding AG 13 January 2022

VERIFICATION PARAMETERS

Type(s) of instruments contemplated	•	Green Bond
Relevant standards	•	Green Bond Principles (updated as of June 2021), administered by the International Capital Market Association
Scope of verification	•	Zug Estates Green Bond Framework (as of 03.01.2022) Zug Estates Asset pool (as of 03.01.2022)
Lifecycle	•	Pre-issuance verification
Validity	•	As long as there is no material change to the Framework

Sustainability Quality of the Issuer and Green Bond Framework



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Scope of work

Zug Estates Holding AG ("Zug Estates" or "the Issuer") commissioned ISS ESG to assist with its Green Bond by assessing three core elements to determine the sustainability quality of the instrument:

- 1. Green Bond's link to Zug Estates' sustainability strategy drawing on Zug Estates' overall sustainability profile and issuance-specific Use of Proceeds category.
- 2. Zug Estates' Green Bond Framework (03.01.2022) benchmarked against the International Capital Market Association's (ICMA) Green Bond Principles (GBP).
- 3. The Asset pool whether the projects contribute positively to the UN SDGs and perform against ISS ESG's issue-specific key performance indicators (KPIs) (See Annex 2).

ZUG ESTATES OVERVIEW

The Zug Estates Group designs, develops, markets and manages properties in the region of Zug, Switzerland. It focuses on central sites which are suitable for a wide range of uses and allow sustainable development. The real estate portfolio of Zug Estates Group contains different sites, respectively located in Zug and in Risch Rotkreuz and is broadly diversified by type of use.





ISS ESG ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ¹
Part 1: Green Bond link to Issuer's sustainability strategy	According to the ISS ESG Corporate Rating published on 12.01.2022, the Issuer shows a poor sustainability performance against the peer group on key ESG issues faced by the Real Estate industry. The Issuer is rated 250 th out of 385 companies within its industry as of January 12, 2022. Zug Estates has taken reasonable measures in selected areas. The Use of Proceeds financed through this Green Bond are consistent with the Issuer's sustainability strategy and material ESG topics for the Issuer's industry. The rationale for issuing Green Bond is described by the Issuer.	Consistent with the Issuer's sustainability strategy
Part 2: Alignment with GBP	The Issuer has defined a formal concept for its Green Bond regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the Green Bond Principles as administered by ICMA.	Aligned
Part 3: Sustainability quality of the Asset pool	The overall sustainability quality of the Asset pool in terms of sustainability benefits, risk avoidance and minimisation is good based upon the ISS ESG assessment. The Green Bond will (re-)finance the mixed-use Suurstoffi neighbourhood, classified as a green building category by ISS ESG ² . The use of proceeds category has a limited contribution to SDG 11 'Sustainable cities and communities'. The environmental and social risks associated with those use of proceeds categories have been well managed.	Positive

¹ ISS ESG's evaluation is based on the Zug Estates' Green Bond Framework (January 2022 version), on the analysed Asset Pool as received on the 14.12.2021, and on the ISS ESG Corporate Rating updated on the 12.01.2022 and applicable at the SPO delivery date.

² ISS ESG deems the "Green Buildings" category as being the most relevant considering the nature of the Suurstoffi site. However, it is important to note that ISS ESG was not provided with information on the share of allocation of the proceeds to the specific parts of the project broken down by the client between Green buildings, Renewable energy, Energy efficiency, Sustainable water and wastewater management, Clean transportation and Terrestrial biodiversity.



ISS ESG SPO ASSESSMENT

PART I: GREEN BOND'S LINK TO ZUG ESTATES' SUSTAINABILITY STRATEGY

A. ASSESSMENT OF ZUG ESTATES' ESG PERFORMANCE

The ISS ESG Corporate Rating provides material and forward-looking environmental, social and governance (ESG) data and performance assessments.

COMPANY	INDUSTRY	DECILE RANK	TRANSPARENCY LEVEL
ZUG ESTATES	REAL ESTATE	7	MEDIUM

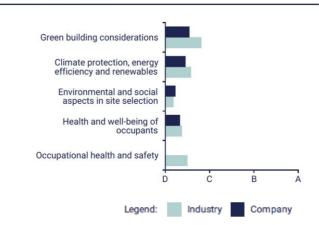
This means that the company currently shows a poor sustainability performance against peers on key ESG issues faced by the Real Estate industry as it obtains a Decile Rank relative to its industry group of 7, given that a decile rank of 1 indicates highest relative ESG performance out of 10.

ESG performance

As of January 12, 2022, this rating places Zug Estates 250th out of 385 companies rated by ISS ESG in the Real Estate industry.

Key challenges faced by companies in terms of sustainability management in this industry are displayed in the chart on the right, as well as the Issuer's performance against those key challenges in comparison to the average industry peers' performance.

Key Issue Performance



Sustainability Opportunities

Zug Estates Holding AG (Zug Estates) operates in two segments, Real Estate and Hotel & Catering. Its real estate portfolio includes shops, offices, and residential units, as well as other residential and commercial properties. As a developer and manager of urban districts, the company's sites include, e.g., mixed-use neighbourhoods, childcare centers, schools and student housing which contribute to social infrastructure and local enhancement and provide a high social benefit. There is no evidence of affordable/social housing or favourable lease conditions for tenants with a social focus. On the environmental side, there is no indication that any of the properties are certified to green building standards such as DGNB, LEED or BREEAM.

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Sustainability Risks

Relevant sustainability risks for a real estate company such as Zug Estates include tenant, employee and contractor health and safety, climate change and resource efficiency of buildings. While there is no comprehensive strategy in place to address all of these issues, Zug Estates has taken reasonable measures in selected areas. In its Suurstoffi district, for example, the company provides for tenant well-being by creating green spaces and urban gardens for the tenants to meet and rest. Further, cross its portfolio the company compiles greenhouse gas (GHG) emission inventories for all relevant scopes, and has set the target to operate its property portfolio carbon neutral by 2023. Its efforts, especially in the area of renewable energies has led to a decreasing trend of GHG emission intensities over the past years. Likewise, water and energy use intensities have decreased. In addition, due to the geographic concentration of its assets (only Switzerland, where high social and environmental standards prevail), Zug Estates' exposure to some of these sustainability risks is limited.

Governance opinion

None of the members of Zug Estates' board of directors (including the board chair Beat Schwab) are considered independent. Consequently, the company's board committees in charge of audit, remuneration and nomination are not independent as well. Zug estates discloses compensation for members of the executive management team on an individual basis and broken down by fixed and variable components. Yet, there is no indication whether the company's policy includes important elements such as long-term incentive components.

Moreover, a sustainability committee on board-level is not evident. In terms of remuneration, it remains unclear whether ESG targets are included in the executive remuneration scheme. A code of conduct is in place though, covering issues such as corruption, conflicts of interest and gifts, favours and entertainment in general terms. Further relevant aspects such as antitrust violations, insider dealings and validity of financial information do not seem to be covered by publicly available company policies. Except for the reference to anonymous reporting channels to facilitate non-compliance reporting, no further measures to ensure compliance with the code of conduct are evident.

Sustainability impact of products and services portfolio

Using a proprietary methodology, ISS ESG assessed the contribution of Zug Estates' current products and services portfolio to the Sustainable Development Goals defined by the United Nations (UN SDGs). This analysis is limited to the evaluation of final product characteristics and does not include practices along Zug Estates' production process.

PRODUCT/SERVICE PORTFOLIO	ASSOCIATED PERCENTAGE OF REVENUE	IMPACT	UN SDGS
Non-luxury residential housing	20%	CONTRIBUTION	11 SUSTAINABLE CITIES AND COMMUNITIES
Others	N/A	NO NET IMPACT	N/A



Breaches of international norms and ESG controversies

The company is not facing any severe controversy.

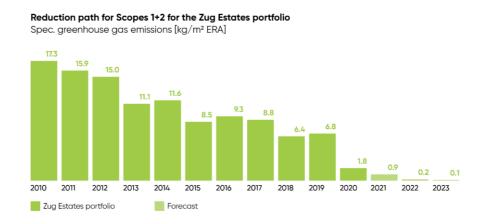
B. CONSISTENCY OF GREEN BOND WITH ZUG ESTATES' SUSTAINABILITY STRATEGY

Key sustainability objectives and priorities defined by the Issuer³

The key sustainability objectives and priorities defined by the Issuer are displayed in the following Materiality matrix:



Zug Estates places the main focus of its sustainability strategy on ecological aspects, as this is where the company expects to have by far the greatest impact. However, a great deal of attention is also paid to the areas of social affairs and governance, and these topics are becoming increasingly important, not least as a result of reporting in accordance with GRI standards since autumn 2021. The lowering path for scope 1 and 2 GHG emissions for the portfolio is displayed below:



³Zug Estates Nachhaltigkeitsbericht September 2021

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Rationale for issuance

The Zug Estates Group holds real estate portfolio worth CHF 1.67 billion as at June 2021, consisting of two sites in the canton of Zug. The Suurstoffi site in Risch Rotkreuz has been built over the past ten years with a strong focus on various aspects of sustainability, while the Zentrum site in Zug consists of already existing properties. Since 2020, areal located in Zug has been connected to the Circulago lake water heating network. According to the company, the Zentrumsareal, and thus the entire portfolio, operates nearly carbon-free from 2023 on. Circulago being a future-oriented project to supply the town of Zug and the southern part of Baar with environment-friendly heating and cooling energy derived from the water of Lake Zug. In addition, the Issuer pursues projects and goals in the areas of materials, biodiversity and water.

According to the company, green financing, such as through green bonds, is thus the logical consequence of Zug Estates' commitment to a sustainable economic development.

Contribution of Use of Proceeds categories to sustainability objectives and priorities

ISS ESG mapped the Use of Proceeds categories financed under this Green Bond with the sustainability objectives defined by the Issuer, and with the key ESG industry challenges as defined in the ISS ESG Corporate Rating methodology for the Real Estate industry. Key ESG industry challenges are key issues that are highly relevant for a respective industry to tackle when it comes to sustainability, e.g., climate change and energy efficiency in the buildings sector. From this mapping, ISS ESG derived a level of contribution to the strategy of each Use of Proceeds categories.

USE OF PROCEEDS	SUSTAINABILITY OBJECTIVES	KEY ESG INDUSTRY	CONTRIBUTION
CATEGORY	FOR THE ISSUER	CHALLENGES	
Green Buildings	✓	√	Contribution to a material objective

Opinion: Despite its moderate performance against the peer group in the Real Estate industry, Zug Estates has taken reasonable measures in selected areas. ISS ESG finds that the Use of Proceeds financed through this Green Bond are consistent with the Issuer's sustainability strategy and material ESG topics for the Issuer's industry. The rationale for issuing Green Bonds is described by the Issuer.

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PART II: ALIGNMENT WITH GREEN BOND PRINCIPLES

1. Use of Proceeds

FROM ISSUER'S FRAMEWORK

The proceeds from the placement of the green bond are invested directly into the Suurstoffi site in Risch Rotkreuz, which meets very high sustainability standards and already operates with net zero carbon emissions.

The mixed-use Suurstoffi site covers an area of 105,000 m², providing enough space for 1,400 residents, almost 2,000 students and over 2,500 jobs. With that in mind, green buildings are not the only consideration of the site development project. Other sustainable aspects include renewable energy sources, natural landscape design, clean transportation and social mixing.

The initiatives in place make contributions under the following eligible green project categories listed in the GBP⁴:

- Green buildings
- Renewable energy
- Energy efficiency
- Sustainable water and wastewater management
- Clean transportation
- Terrestrial biodiversity

Green buildings

All buildings on the Suurstoffi site will be operated with net zero carbon emissions thanks to an energy system that was unique within Switzerland at the time of construction. An anergy grid with heat pumps supplies all buildings on site with heating and cooling energy from the geothermal installations that are underground by as much as 280 meters, meaning that the ground underneath the site is being used to store heat and cold naturally without any carbon emissions.

Sustainability is a big part of the construction work at the Suurstoffi site too, with wood being used as an important building material. One project with 156 homes made from wood was established back in 2014, when it was the largest wood-based construction project in Central Switzerland. Zug Estates built Switzerland's first wooden high-rise building in 2018 and the current tallest wooden high-rise building has been on this very site since 2019, standing at 60 meters tall. 33.2% of the rentable space is currently attributable to buildings made from wood.

Whenever any of the buildings were erected on site, Zug Estates followed the Minergie limits but did not obtain the relevant certification. A company called OekoWatt checked that the buildings do indeed comply with the Minergie standards. Upon exemption from obligatory consumption-based

⁴ ISS ESG deems the "Green Buildings" category as being the most relevant considering the nature of the Suurstoffi site. However, it is important to note that ISS ESG was not provided with information on the share of allocation of the proceeds to the specific parts of the project broken down by the client between Green buildings, Renewable energy, Energy efficiency, Sustainable water and wastewater management, Clean transportation and Terrestrial biodiversity.

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billing for heating and hot water, this was confirmed by the Energy Department of the Building Office for the Canton of Zug in March 2019.

As a way of ensuring that the buildings would be coherent as standalone structures and as part of the whole site, a project competition was launched to find teams of general planners for each construction site within the overall Suurstoffi site as per SIA 142. Each interdisciplinary judging panel was made up of specialists from Zug Estates and external experts, with the voting majority going to the external experts. The criteria used to assess the teams included architecture, urban development, open space, economic viability, sustainability, functionality, materials and building ecology.

Renewable energy sources

Where possible, solar power systems are installed on the roofs (and sometimes even the fronts) of the buildings at the Suurstoffi site. This equipment generated 810 MWh in 2020. Zug Estates has set up its own private consumption community (PCC) on site that can be joined by all residents and business tenants. As of 31 December 2021, 343 parties had signed up. With this in place, Zug Estates can sell solar power directly to residents on site, thereby reducing the strain on the national and international power grid. If the power being produced on site cannot meet demand, extra can be bought in. All power comes from renewable energy sources. Agreements are in place to ensure that external energy sources are local to further reduce the strain on the power grid and save on resources required to set up and maintain large power networks.

Natural landscape design

When designing the Suurstoffi site, Zug Estates was committed to natural landscaping with a focus on biodiversity. Research by the Lucerne University of Applied Sciences and Arts has proven that the outside temperature on the site is lower than in nearby neighbourhoods thanks to the shading provided, the high proportion of green spaces and the clever positioning of the buildings.

The clear focus on broad and balanced biodiversity as part of the landscape design has led to the whole area being certified as a "natural living space" by the Nature & Economy Foundation.

Clean transportation

Suurstoffi is a largely vehicle-free site. Otherwise, Zug Estates encourages environmentally friendly transportation on the basis of a two-pronged strategy.

First and foremost, there has been a conscious effort to reduce the need for transportation through the mixed land use and extensive infrastructure on site. On top of that, preference is given to potential residential tenants who work on site to reduce the amount of commuting required.

Secondly, Zug Estates is actively involved in processes and projects aimed at making mobility sustainable.

 The company has joined forces with the Rotkreuz community to form a local group committed to finding transportation solutions with other big landowners.

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- Since the Suurstoffi site is right next to the local train station, Zug Estates contributed a large amount of funding for an extra railway crossing to be built so that the platform can be accessed directly from the site.
- All tenants have the option of being allocated an electric vehicle charging station.
- There are plenty of mobility vehicles available for use on site too.
- Zug Estates is currently working with PostAuto, Mobility and the Mobility Academy on a pilot project for carefree mobility called "Sorglos mobil". Public transport, electric bikes, cargo bikes and car shares are all pooled together on one mobile app. The plan is for the scheme to be rolled out across Switzerland one day.

Social aspects

The social aspects of life on site are another key focus. At the heart of this is the fact that the site has multiple uses, bringing together home, work, leisure, health and education in one location. The extensive neighbourhood infrastructure is valued highly and actively managed by Zug Estates.

With the aim of social mixing in mind, Zug Estates included 74 affordable rooms for students on site. 160 serviced apartments are also available to encourage people of retirement age to move here. Zug Estates also has staff representation on site to maintain contact with residents and offer exemplary customer service. On top of the services on offer, there is also a digital app that tenants can use to communicate with the building management team and other residents on site.

United Nations' Sustainable Development Goals (SDGs)

With the Suurstoffi site and the measures that have already been taken and are continually evolving, Zug Estates is contributing to some of the United Nations' Sustainable Development Goals (SDGs)⁵:

- Affordable and clean energy (Goal 7)
- Industry, innovation and infrastructure (Goal 9)
- Sustainable cities and communities (Goal 11)
- Climate action (Goal 13)

Opinion: ISS ESG considers the Use of Proceeds description provided by Zug Estates' Green Bond Framework as aligned with the GBP. The proceeds of the underling green bond are directly invested into the Suurstoffi site in Risch Rotkreuz. Environmental benefits of the project category are described and completed with social benefits.

2. Process for Project Evaluation and Selection

FROM ISSUER'S FRAMEWORK

All proceeds from the placement of the green bond are invested into the Suurstoffi site, which already meets very high sustainability standards. As a result, many of the processes for project

⁵ These SDGs have been identified by Zug Estate. ISS ESG assessment on the SDG impact is illustrated on page 15.

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evaluation and selection relating to sustainability had already been taken care of whilst the whole site was being developed over the past decade.

As site developer, Zug Estates goes beyond sustainable processes for project evaluation and selection relating to the acquisition and development of new buildings. There are also ongoing considerations as to how existing sites can be developed and improved with sustainability in mind.

In fact, Zug Estates has a dedicated interdisciplinary sustainability team that meets several times a year and reports to the Board of Directors.

The team is made up of a core group headed up by the CEO, which coordinates any relevant initiatives. There is also an extended group of employees working in project development, strategic site management, HR, portfolio management, communications and finance. Responsible for the implementation of any approved initiatives, they meet at regular intervals throughout the year, sometimes getting input from external contributors. An in-depth look at all things sustainability can be found online here: https://www.zugestates.ch/nachhaltigkeit.

Opinion: ISS ESG considers the Process for Project Evaluation and Selection description provided by Zug Estates' Green Bond Framework as aligned with the GBP. The Issuer defines clear responsibilities and involves various stakeholders. All proceeds from the placement of the green bond are invested into the Suurstoffi site.

3. Management of Proceeds

FROM ISSUER'S FRAMEWORK

The proceeds from the green bond are used exclusively to directly finance and refinance the Suurstoffi site projects described in section Use of Proceeds. This direct allocation means that proceeds from the green bond do not need to be placed temporarily.

Opinion: ISS ESG finds that Management of Proceeds proposed by Zug Estates' Green Bond Framework is well aligned with the Green Bond Principles from ICMA. The Issuer commits to a prompt allocation period.

4. Reporting

FROM ISSUER'S FRAMEWORK

Alongside the company's general sustainability reporting, Zug Estates publishes a specific green bond report every year here: https://www.zugestates.ch/stories/green-bond-reporting.

The green bond report consists of an allocation reporting and an impact reporting.





Allocation Reporting

The proceeds from the green bond are used exclusively to directly finance and refinance the Suurstoffi site projects described in section Use of Proceeds.

The Corporate Finance Department is responsible for allocating proceeds as far as internal reporting and liquidity management are concerned. The use of proceeds is documented once a year in a public green bond report.

The allocation report consists of the following information:

- Market value of the Suurstoffi site
- Total value of green bond proceeds
- Share of allocated proceeds

If the Suurstoffi site were to be sold, the funds would be reinvested into sustainable projects within 24 months in line with the requirements of the Green Bond Principles. In that case, the proceeds would be allocated by the sustainability team in consultation with the Board of Directors and the Framework would be amended accordingly. The investors would be informed about this change to the use of proceeds in an ad hoc report and then in the annual green bond report.

Impact Reporting

At the end of every August, Zug Estates publishes a detailed sustainability report on all the company's relevant activities. This report is made available to the public on our website: https://www.zugestates.ch/downloads. The ESG report is compiled in accordance with the Global Reporting Initiative (GRI) standards.

Zug Estates also complements its sustainability report with an annual sustainability forum that is open to the general public in the autumn. After an update on the current Zug Estates environmental projects, national and international experts are invited to discuss relevant topics and initiatives relating to all thing's sustainability.

Beside the sustainability report on company level, green bond report includes a breakdown of detailed sustainability figures for each of the properties and parts of the portfolio pledged as security for green bonds. As far as the Suurstoffi site is concerned, the following figures are to be published every year:

- Percentage of space certified as a natural living space by the Nature & Economy Foundation
- Number of private consumption community (PCC) agreements

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- Percentage of parking spaces available as electric vehicle charging stations
- Final energy consumption per square metre of energy reference area (in kWh/m²)
- Scope 1 and 2 greenhouse gas emissions per square metre of energy reference area (in kg CO₂eq/m²)
- Power production (PV installations) (MWh)
- Percentage of rentable space in wooden buildings
- Water intensity (m³/m² rentable space)
- Water withdrawal (m³)

Opinion: ISS ESG finds that the reporting proposed by Zug Estates' Green Bond Framework is aligned with the Green Bond Principles from ICMA. Further, the Issuer defines the level of reporting, the information, frequency, scope and duration of the allocation and impact reporting and publicly discloses it, which is best market practice.

External review

FROM ISSUER'S FRAMEWORK

Zug Estates hired an independent second opinion provider ISS ESG to check its framework for green financing against the GBP. The report by ISS ESG can be accessed on the Zug Estates website.

Since the proceeds from the green bond are being invested directly into an existing sustainable site, the allocation of proceeds does not need to be checked regularly by an external auditor.



PART III: SUSTAINABILITY QUALITY OF THE ISSUANCE

A. CONTRIBUTION OF THE GREEN BOND TO THE UN SDGs⁶

Based on the assessment of the sustainability quality of the Green Bond Asset pool and using a proprietary methodology, ISS ESG assessed the contribution of the Zug Estates' Green Bond to the Sustainable Development Goals defined by the United Nations (UN SDGs).

This assessment is displayed on 5-point scale (see Annex 2 for methodology):

Significant	Limited	No	Limited	Significant
Obstruction	Obstruction	Net Impact	Contribution	Contribution

Each of the Green Bond's Use of Proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Green Buildings ⁷ In line with Minergie standards ⁸ or equivalent	Limited Contribution	11 SUSTAMABLE CITIES AND COMMUNITIES

⁶ ISS ESG deems the "Green Buildings" category as being the most relevant considering the nature of the Suurstoffi site. As such, this section is tailored to the SDG impact of the buildings. However, it is important to note that ISS ESG was not provided with information on the share of allocation of the proceeds to the specific parts of the project broken down by the client between Green buildings, Renewable energy, Energy efficiency, Sustainable water and wastewater management, Clean transportation, and Terrestrial biodiversity.

⁷ The issuer disposes and plan to further develop a solar panel system on the Suurstoffi site, assessed with a significant contribution to SDG 7 and 13.

⁸ Zug Estates followed the Minergie standards but did not obtain the relevant certification. According to the issuer, OekoWatt, an independent service provider in the field of energy projects certified the alignment of the underlying assets to the Minergie standards.

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B. MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS ASSOCIATED WITH THE ASSET POOL

Green Buildings9

The Use of Proceeds category "Green Buildings" has a limited contribution to the SDG 11 "Sustainable cities and communities". The table below presents the findings of an ISS ESG assessment of the Asset pool against ISS ESG KPIs.

ASSESSMENT AGAINST ISS ESG KPI

Green Buildings

Site selection

- For the Suurstoffi Areal responsible site selection (e.g. brownfield development, exclusion of protected areas and sites of high environmental value) was taken into consideration.
- ✓ The Suurstoffi Areal is located within 1 km from one or more modalities of public transport.

Construction standards

- The assets (re-)financed under the issuance are located in Switzerland where high labour and health and safety standards are in place (e.g., ILO core conventions).
- O 33% of properties at Suurstoffi Areal provide for sustainable procurement regarding building materials (e.g., recycled materials, third-party certification of wood-based materials).

Water use minimization in buildings

100% of assets provide for measures to reduce water consumption (e.g., water metering, high-efficiency fixtures and fittings, rainwater harvesting). This is based on Swiss national legislation SIA 385/1 "Domestic hot water in buildings", SIA 385/2 and SIA 2026/2017 "Efficient use of drinking water in buildings".

Safety of building users

All of the (re-)financed assets ensure operational safety (e.g., emergency exits, fire sprinklers, fire alarm systems) due to swiss national legislation.

Energy efficiency (Prerequisite for Green Buildings)

All assets underwent an appropriate and detailed selection process that ensures good standards regarding energy efficiency. All assets to be (re)-financed are among the top 15% of the respective national building stock, adhering to the MINERGIE standard (though not explicitly certified, as described below 23.8 kWh/m2A and is thus below 50kWh/m2A) or equivalent.

⁹ ISS ESG deems the "Green Buildings" category as being the most relevant considering the nature of the Suurstoffi site. As such, this section is tailored to the risks of the "Green Buildings" category. However, it is important to note that ISS ESG was not provided with information on the share of allocation of the proceeds to the specific parts of the project broken down by the client between Green buildings, Renewable energy, Energy efficiency, Sustainable water and wastewater management, Clean transportation and Terrestrial biodiversity.

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Sustainability labels

No or limited information is available on the percentage of assets that have obtained a BREEAM (very good) or equivalent LEED certification. However, all assets meet the requirements according to MINERGIE standard at the time of realization, as assessed by Oekowatt.

Environmental aspects of solar power plants

The efficiency of the solar photovoltaic systems varies due to different years of construction. According to the information provided, a significant share of the solar PVs has a conversion efficiency slightly above 15%.

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- 2. ISS ESG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
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Sustainability Quality of the Issuer and Green Bond Framework



ANNEX 1: Methodology

ISS ESG Green KPIs

The ISS ESG Green Bond KPIs serve as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the use of proceeds of Zug Estates' Green Bond.

It comprises firstly the definition of the use of proceeds category offering added social and/or environmental value, and secondly the specific sustainability criteria by means of which this added value and therefore the sustainability performance of the assets can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the assets and which can also be used for reporting. If a majority of assets fulfill the requirement of an indicator, this indicator is then assessed positively. Those indicators may be tailor-made to capture the context-specific environmental and social risks.

Environmental and social risks assessment methodology

ISS ESG evaluates whether the assets included in the asset pool match the eligible project category and criteria listed in the Green Bond KPIs.

All percentages refer to the amount of assets within one category (e.g. wind power). Additionally, the assessment "no or limited information is available" either indicates that no information was made available to ISS ESG or that the information provided did not fulfil the requirements of the ISS ESG Green Bond KPIs.

The evaluation was carried out using information and documents provided to ISS ESG on a confidential basis by Zug Estates (e.g. Due Diligence Reports). Further, national legislation and standards, depending on the asset location, were drawn on to complement the information provided by the issuer.

Assessment of the contribution and association to the SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method, ISS ESG identifies the extent to which Zug Estates' Green Bond contributes to related SDGs.

Sustainability Quality of the Issuer and Green Bond Framework



ANNEX 2: ISS ESG Corporate Rating Methodology

Methodology - Overview

The ESG Corporate Rating methodology was originally developed by Institutional Shareholder Services Germany (formerly oekom research) and has been consistently updated for more than 25 years.

ESG Corporate Rating - The ESG Corporate Rating universe, which is currently expanding from more than 8,000 corporate issuers to a targeted 10,000 issuers in 2020, covers important national and international indices as well as additional companies from sectors with direct links to sustainability and the most important bond issuers that are not publicly listed companies.

The assessment of a company's social & governance and environmental performance is based on approximately 100 environmental, social and governance indicators per sector, selected from a pool of 800+ proprietary indicators. All indicators are evaluated independently based on clearly defined performance expectations and the results are aggregated, taking into account each indicator's and each topic's materiality-oriented weight, to yield an overall score (rating). If no relevant or up-to-date company information with regard to a certain indicator is available, and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the indicator is assessed with a D-

In order to obtain a comprehensive and balanced picture of each company, our analysts assess relevant information reported or directly provided by the company as well as information from reputable independent sources. In addition, our analysts actively seek a dialogue with the assessed companies during the rating process and companies are regularly given the opportunity to comment on the results and provide additional information.

Analyst Opinion - Qualitative summary and explanation of the central rating results in three dimensions:

- (1) Opportunities assessment of the quality and the current and future share of sales of a company's products and services, which positively or negatively contribute to the management of principal sustainability challenges.
- (2) Risks summary assessment of how proactively and successfully the company addresses specific sustainability challenges found in its business activity and value chain, thus reducing its individual risks, in particular regarding its sector's key issues.
- (3) Governance overview of the company's governance structures and measures as well as of the quality and efficacy of policies regarding its ethical business conduct.

Norm-Based Research - Severity Indicator - The assessment of companies' sustainability performance in the ESG Corporate Rating is informed by a systematic and comprehensive evaluation of companies' ability to prevent and mitigate ESG controversies. ISS ESG conducts research and analysis on corporate involvement in verified or alleged failures to respect recognized standards for responsible business conduct through Norm-Based Research.

Norm-Based Research is based on authoritative standards for responsible business conduct such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles for Business and Human Rights and the Sustainable Development Goals.

As a stress-test of corporate disclosure, Norm-Based Research assesses the following:

- · Companies' ability to address grievances and remediate negative impacts
- · Degree of verification of allegations and claims
- · Severity of impact on people and the environment, and systematic or systemic nature of malpractices

Severity of impact is categorized as Potential, Moderate, Severe, Very severe. This informs the ESG Corporate Rating.

Decile Rank - The Decile Rank indicates in which decile (tenth part of total) the individual Corporate Rating ranks within its industry from 1 (best – company's rating is in the first decile within its industry) to 10 (lowest – company's rating is in the tenth decile within its industry). The Decile Rank is determined based on the underlying numerical score of the rating. If the total number of companies within an industry cannot be evenly divided by ten, the surplus company ratings are distributed from the top (1 decile) to the bottom. If there are Corporate Ratings with identical absolute scores that span a division in decile ranks, all ratings with an equal decile score are classified in the higher decile, resulting in a smaller number of Corporate Ratings in the decile below.

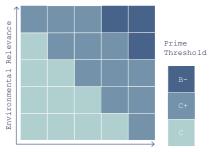
Distribution of Ratings - Overview of the distribution of the ratings of all companies from the respective industry that are included in the ESG Corporate Rating universe (company portrayed in this report: dark blue).

Sustainability Quality of the Issuer and Green Bond Framework



Industry Classification - The social and environmental impacts of industries differ. Therefore, based on its relevance, each industry analyzed is classified in a Sustainability Matrix

Depending on this classification, the two dimensions of the ESG Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the ISS ESG Prime Status (Prime threshold) are defined (absolute best-in-class approach).



Social & Governance Relevance

Industry Leaders - List (in alphabetical order) of the top three companies in an industry from the ESG Corporate Rating universe at the time of generation of this report.

Key Issue Performance - Overview of the company's performance with regard to the key social and environmental issues in the industry, compared to the industry average.

Performance Score - The ESG Performance Score allows for cross-industry comparisons using a standardized best-in-class threshold that is valid across all industries. It is the numerical representation of the alphabetic ratings (D- to A+) on a scale of 0 to 100 with 50 representing the prime threshold. All companies with values greater than 50 are Prime, while companies with values less than 50 are Not Prime. As a result, intervals are of varying size depending on the original industry-specific prime thresholds.

Rating History - Development of the company's rating over time and comparison to the average rating in the industry.

Rating Scale - Companies are rated on a twelve-point scale from A+ to D-:

A+: the company shows excellent performance.

D-: the company shows poor performance (or fails to demonstrate any commitment to appropriately address the topic).

Overview of the range of scores achieved in the industry (light blue) and indication of the grade of the company evaluated in this report (dark blue).

Sources of Information - A selection of sources used for this report is illustrated in the annex.

Status & Prime Threshold - Companies are categorized as Prime if they achieve/exceed the sustainability performance requirements (Prime threshold) defined by ISS ESG for a specific industry (absolute best-in-class approach) in the ESG Corporate Rating. Prime companies are sustainability leaders in their industry and are better positioned to cope with material ESG challenges and risks, as well as to seize opportunities, than their Not Prime peers. The financial materiality of the Prime Status has been confirmed by performance studies, showing a continuous outperformance of the Prime portfolio when compared to conventional indices over more than 14 years.

Transparency Level - The Transparency Level indicates the company's materiality-adjusted disclosure level regarding the environmental and social performance indicators defined in the ESG Corporate Rating. It takes into consideration whether the company has disclosed relevant information regarding a specific indicator, either in its public ESG disclosures or as part of the rating feedback process, as well as the indicator's materiality reflected in its absolute weight in the rating. The calculated percentage is classified in five transparency levels following the scale below.

0% - < 20%: very low

20% - < 40%: low

40% - < 60%: medium

60% - < 80%: high

80% - 100%: very high

For example, if a company discloses information for indicators with a cumulated absolute weight in the rating of 23 percent, then its Transparency Level is "low". A company's failure to disclose, or lack of transparency, will impact a company's ESG performance rating negatively.

Sustainability Quality of the Issuer and Green Bond Framework



ANNEX 3: Quality management processes

SCOPE

Zug Estates commissioned ISS ESG to compile a Green Bond SPO. The Second Party Opinion process includes verifying whether the Green Bond Framework aligns with the Green Bond Principles and to assess the sustainability credentials of its Green Bond, as well as the issuer's sustainability strategy.

CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Green Bond Principles
- ISS ESG Key Performance Indicators relevant for Use of Proceeds category selected by the Issuer

ISSUER'S RESPONSIBILITY

Zug Estates' responsibility was to provide information and documentation on:

- Framework
- Asset pool
- Documentation of ESG risks management at the asset level

ISS ESG's VERIFICATION PROCESS

ISS ESG is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS ESG has built up a reputation as a highly reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

ISS ESG has conducted this independent Second Party Opinion of the Green Bond to be issued by Zug Estates based on ISS ESG methodology and in line with the ICMA Green Bond Principles.

The engagement with Zug Estates took place from December 2021 to January 2022.

ISS ESG's BUSINESS PRACTICES

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behaviour and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

Sustainability Quality of the Issuer and Green Bond Framework



About ISS ESG SPO

ISS ESG is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

As part of our Sustainable (Green & Social) Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the Issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/

For Information about SPO services, contact: SPOsales@isscorporatesolutions.com

For Information about this Green Bond SPO, contact: SPOOperations@iss-esg.com

Project team

Project lead Project support Project	iect supervisior	١
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