

SECOND PARTY OPINION¹

ZugEstates ON THE SUSTAINABILITY OF ZUG ESTATES' "GREEN BOND"

August 2019

SCOPE

imug, as a partner of Vigeo Eiris Network, was commissioned to provide an independent opinion (hereafter the "Second Party Opinion" or "SPO") on the sustainability credentials and management of the planned "Green Bond" (the "Bond")² to be issued by Zug Estates (the "Issuer").

Our opinion is established according to Vigeo Eiris' Environmental, Social and Governance ("ESG") exclusive assessment methodology and to the latest version of ICMA's Green Bond Principles (the "GBP") voluntary guidelines, edited in June 2018.

Our opinion is based on the review of the following components:

- 1) **Issuer:** we assessed the Issuer's integration of ESG factors in its commitments and strategy. We also summarized the assessment of the Issuer's management of potential stakeholders-related ESG controversies and its involvement in controversial activities³ (both evaluated by Vigeo Eiris in August 2019).
- 2) **Issuances:** we assessed the Bond issuance's potential contribution to sustainability and its alignment with the four core components of the GBP 2018 and the coherence between the Green Bond and the Issuer's environmental commitments and priorities.

Our sources of information are multichannel, combining data from (i) public information gathered from public sources, press content providers and stakeholders, (ii) information from Vigeo Eiris exclusive ESG rating database, and (iii) information provided by the Issuer through documents and interviews conducted with Issuer's managers and stakeholders involved in the Bonds issuances, held at the offices of Zug Estates in Zug (Switzerland).

imug carried its due diligence assessment from May 8th to May 28th, 2018, and completed it in August 2019. We consider that we were provided with access to all the appropriate documents and interviewees we solicited. We consider that the information made available enables us to establish our opinion with a reasonable level of assurance on its completeness, precision and reliability.

IMUG'S OPINION

imug is of the opinion that the Green Bond of Zug Estates is aligned with the four core components of the Green Bond Principles 2018.

We express a reasonable assurance⁴ (our highest level of assurance) on the Issuer's commitments and on the Issuances' potential contribution to sustainability.

In addition, the Eligible Categories are likely to contribute to four of the United Nations' Sustainable Development Goals ("SDGs"), namely : Goal 7. Affordable and Clean energy, Goal 11. Sustainable Cities and Communities, Goal 12. Responsible Consumption and Production and Goal 13. Climate Action.

1) Issuer (see Part I):

- ▶ As of May 2018, Zug Estates' Integration of ESG factors in its commitments and strategy is overall good. The Issuer's managerial approach appears advanced in the Environmental pillar and good in the Social and the Governance pillars.
- ▶ As of today, the Issuer is not facing any stakeholders-related ESG controversy.
- ▶ Zug Estates has a minor involvement in Alcohol (sale of alcoholic drinks by the group company Hotelbusiness Zug AG). The Issuer is not involved in the other 14 controversial activities screened.

2) Issuance (see Part II):

- ▶ The Issuer has described the main characteristics of the Bond in its Internal Report (25/05/2018).
We are of the opinion that the Green Bond is coherent with Zug Estates's main sector sustainability issues, with its sustainability strategy and priorities, and that it contributes to achieve its sustainable development commitments.

¹ This opinion is to be considered as the "Second Party Opinion" described in the GBP voluntary guidelines (June 2018 Edition) edited by the International Capital Market Association (www.icmagroup.org).

² The "Green Bond" is to be considered as the bond to be potentially issued, subject to the discretion of the Issuer. The term "Green Bond" has been decided by the Issuer: it does not correspond to any opinion from Vigeo Eiris.

³ The 15 controversial activities analysed by Vigeo Eiris are: Alcohol, Animal welfare, Chemicals of concern, Civilian firearms, Fossil Fuels industry, Coal, Tar sands and oil shale, Gambling, Genetic engineering, High interest rate lending, Military, Nuclear power, Pornography, Reproductive medicine, and Tobacco.

⁴ Definition of Vigeo Eiris' scales of assessment (as detailed in the Methodology section).

An area of improvement includes to formalize a Green Bond Framework and to communicate it to the investors.

Use of Proceeds

- ▶ The net proceeds of the Bond will exclusively finance or refinance, in full or in part, Eligible Assets falling under one Eligible Green Category, namely: Green buildings/Residential and Working sites. We consider the definition of the Eligible Assets category is clearly defined.

The Eligible Assets category is intended to contribute to three main environmental objectives (Climate change mitigation, Protection of Biodiversity, and Protection of Natural Resources). These objectives are formalised in the Internal Report, considered relevant and overall clear.

The expected environmental benefits of the Eligible Assets category are defined but partially precise, due to the lack of quantitative targets. The issuer has committed that the expected benefits will be assessed and quantified in the annual reporting. Area of improvement includes to quantify ex ante expected environmental benefits (targets).

Zug Estates has declared exclusively allocating the Green Bond proceeds to refinancing its “construction site 1” which was financed in the short term by a CHF 100 million loan. Thus, 100% of the proceeds will be allocated for refinancing. The Issuer has committed that a look-back period of maximum 12 months will be applied, in line with best market practices.

Process for Projects Evaluation and Selection

- ▶ The process for projects’ evaluation and selection is clearly defined but partially formalized. We consider that the process is reasonably structured, transparent and relevant.

The process relies on explicit and relevant selection criteria.

The identification of the environmental and social risks associated to the Eligible Assets is considered to be good. Processes and appropriate measures have been implemented to manage all these environmental risks and most of these social risks.

Management of Proceeds

- ▶ The rules for the management of proceeds are clearly defined. We consider that they would enable a transparent and documented allocation process.

Reporting

- ▶ The reporting commitments and process appear to be good, covering both the funds allocation and environmental benefits of the Eligible Assets (outcomes and impacts). We consider that the selected environmental and social reporting indicators are overall relevant, however the reporting lacks indicator’s units and baselines to ensure the monitoring of environmental and social benefits.

In addition, Zug Estates has committed that its Bond will be supported by external reviews:

- A pre-issuance consultant review: the hereby Second Party Opinion performed by imug under Vigeo Eiris supervision, covering all the features of the Bond, based on pre-issuance assessment and commitments, to be made publicly accessible by the Issuer on its website⁵ at the date of the issuance, in line with good market practices.
- An annual verification: an independent third party will verify the allocation of funds, the compliance in all material aspects, from the real allocation of funds to the Eligible Assets and its alignment with the eligibility criteria, once a year until the full allocation of proceeds and later in the case of any material change. In addition, environmental benefits will be assessed and quantified annually by the University of Luzern – for energy and GHG-emissions and another independent agency for outside spaces/biodiversity.

This Opinion is valid, limited to Zug Estates’ first Green Bond to be issued in September 2019.

August 30th, 2019

Annika Thorns
Senior Sustainability Consultant

Muriel Caton
Managing Director Sustainable Finance Strategy

Disclaimer

Transparency on the relation between Vigeo Eiris/imug and the Issuer: Vigeo Eiris/imug have not carried out any audit mission or consultancy activity for Zug Estates and no established relationship (financial nor other) exist between Vigeo Eiris/Imug and the Issuer.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Bond, based on the information which has been made available to Vigeo Eiris/imug. Vigeo Eiris/imug have neither interviewed stakeholders out of the Issuer’s employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. Providing this opinion does not mean that Vigeo Eiris/imug certify the effectiveness, the excellence or the irreversibility of the assets to be financed by the Bond. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by Vigeo Eiris/imug neither focuses on the financial performance of the Bond, nor on the effective allocation of its proceeds. Vigeo Eiris/imug are not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

Restriction on distribution and use of this opinion: the opinion is provided by Vigeo Eiris to the Issuer and can only be used by the Issuer. The distribution and publication of the final SPO are at the discretion of the Issuer, submitted to Vigeo Eiris approval.

DETAILED RESULTS

Part I. ISSUER

Zug Estates conceives, develops, markets and manages properties in the Zug region in Zurich, Switzerland.

Level of Zug Estates' integration of ESG factors in its commitments and strategy

As of May 2018, Zug Estates's integration of ESG factors in its commitments and strategy is considered overall good.

Domain	Comments	Opinion
Environment	Zug Estates' strategy in the Environmental domain is advanced.	Advanced
	The company displays a solid environmental strategy covering both its direct and indirect impacts. Environmental criteria are integrated in the major part of the company's policies. Noteworthy are the integration of targets regarding a zero-zero-strategy (no GHG-emissions and as possible no additional energy input from outside) for the entire portfolio, 100% renewable energy and no GHG-emissions also including mobility and biodiversity aspects.	Good
	Zug Estates displays a strong awareness of the issue "climate change" by making the zero-zero approach a strategic priority since 2007. The approach is holistic covering also mobility and biodiversity topics. Quantitative output and impact indicators are monitored by external institutions and reported annually. All environmental commitments are integrated into the Code of Conduct and tenders include environmental requirements.	Limited
		Weak
Social	Zug Estates' strategy in the Social pillar is good.	Advanced
	As of Community Involvement and Stakeholder Engagement Zug Estates organizes an open Sustainability Forum every year to report on the latest developments. For their portfolio, a minimum number of apartments for student is set to secure the diversity of tenants and to ensure short ways and low GHG-emissions due to mobility (since the University of Luzern is located on Suurstoffi site). Local authorities and communities are involved in the project planning process from the beginning on.	Good
	In terms of Business Behaviour, relevant policies are implemented to ensure a fair and responsible relation with clients.	Limited
	Regarding Human Resources, in terms of training and career management, Zug Estates focuses in promoting job mobility. Zug Estates' Code of Conduct includes requirements to ensure labour rights and rights of underage people, non-discrimination, non-exploitation and non-harassment. However, Human Rights and the Core Labour standards by the International Labour Organization (ILO) are not explicitly mentioned.	Weak
Governance	Zug Estates' strategy in Corporate Governance is good.	Advanced
	All members of the Zug Management are responsible for the CSR (Corporate Social Responsibility) topics and two are represented in the sustainability meetings.	Good
	The roles of Chairman of the Board of Directors and CEO are separated and all five members of the Board of Directors are non-executive and independent from the company. An internal control system covers CSR risks inherent to the institution's business operations.	Limited
	Zug Estates commits on the standards of the directive on information relating to Corporate Governance by the SIX Swiss Exchange. The commitment to prevent corruption and money laundering is integrated in the Code of Conduct.	Weak

Management of stakeholders-related ESG controversies

As of August 2019, Zug Estates did not face stakeholder-related ESG controversies.

Involvement in controversial activities

As of today, Zug Estates has a minor involvement ([0;5] percent of its turnover) in Alcohol, derived from the sale of alcoholic drinks by the group company Hotelbusiness Zug AG.

Zug Estates is not involved in any of the other 14 controversial activities screened under Vigeo Eiris methodology, namely: Animal welfare, Chemicals of concern, Civilian firearms, Fossil Fuels Industry, Coal, Tar sands and oil shale, Gambling, Genetic engineering, High interest rate lending, Military, Nuclear Power, Pornography, Reproductive Medicine and Tobacco.

The controversial activities research provides screening on companies to identify involvement in business activities that are subject to philosophical or moral beliefs. The information does not suggest any approval or disapproval on their content from Vigeo Eiris.

Part II. ISSUANCE

Coherence of the issuance

Context note: According to United Nations', the Real Estate sector accounts for 40% of the world's energy consumption and 33% of all Greenhouse Gas emissions. Therefore, this sector can play a leadership role in the way carbon emissions are valued and incorporated into property development, design and management, Real Estate actors should rely on international certifications that frame buildings' environmental performance (including LEED, BREEAM). Since existing buildings will be standing for the next decades, the improvement of energy efficiency is a priority in the fight to climate change.

We are of the opinion that the Green Bond is coherent with Zug Estates's main sector sustainability issues, with its sustainability strategy and priorities, and that it contributes to achieve its sustainable development commitments.

Zug Estates conceives, develops, markets and manages properties in the Zug region. It focuses on centrally located sites suitable for a wide range of uses and with potential for sustainable development consistent with the sustainable development priorities of the real estate sector – i.e. the reduction of atmospheric emissions and the reduction of energy use and the protection of natural resources.

Zug Estates has a sustainability strategy called “zero-zero”, which objective is to operate its entire portfolio with renewable energy and without GHG-emissions. In developing and implementing its real estate projects, Zug Estates has set ecological objectives:

- Energy: Use of renewable energy sources; efficient use of energy and resources
- Materials and products: Use of materials low in pollutants; use of energy-efficient technologies, products and equipment; short transportation routes
- Emissions: Minimization of GHG emissions, other combustion gases and fine particulates; reduction of noise and light emissions
- Outdoor spaces: Creation of green city spaces; diversity of offerings and use of external spaces

Zug Estates plans to contribute to the overall Switzerland goal to reduce the private energy consumption by one third by 2050 compared to 2017, GHG emissions by one quarter. The goal is based on the guideline “energy efficiency path” by the Association of Swiss Architects and Engineers. The guideline emphasizes a holistic energetic approach including operating power, grey energy and site depending mobility. The named targets in the guideline enable an energy analysis including the whole life cycle of buildings that takes also mobility into account. By issuing a “Green Bond” to finance the defined Eligible Assets category (green buildings and residential/ working sites), Zug Estates coherently responds to the above-mentioned commitments. In addition, the environmental objectives of Zug Estates' first Green Bond address the sector's main sustainability issues, namely the GHG emissions reduction, the reduction of energy use by buildings and the protection of natural resources.

Use of proceeds

The net proceeds of the Bond will exclusively finance or refinance, in full or in part, Eligible Assets falling under one Eligible Green Category, namely: Green buildings/Residential and Working sites. We consider the definition of the Eligible Assets category is clearly defined.

All payments for the Eligible Assets are already completed and interim financed via short-term credits or mortgage loans. Those credits and loans will be repaid by the proceeds of the Green Bond. The loans and credits have been used to finance projects for the Suurstoffi site. All current expenses are covered through rental income, additional financing is explicitly used for the development of the Suurstoffi site.

The Eligible Assets category is intended to contribute to three main environmental objectives (Climate change mitigation, Protection of Biodiversity, and Protection of Natural Resources). These objectives are formalised in the Internal Report and considered relevant and overall clear.

The expected environmental benefits of the Eligible Assets category are defined but partially precise, due to the lack of quantitative targets. The issuer has committed that the expected benefits will be assessed and quantified in the annual reporting. Area of improvement includes to quantify ex ante expected environmental benefits (targets).

Zug Estates has declared exclusively allocating the Green Bond proceeds to refinancing its “construction site 1” which was financed in the short term by a CHF 100 million loan. Thus, 100% of the proceeds will be allocated for refinancing. In addition, the Issuer has committed that a look-back period of maximum 12 months will be applied, in line with best market practices.

Zug Estates Internal Report			Vigeo Eiris analysis
Eligible Assets Category	Definition of the category, and Eligibility Criteria	Environmental and social objectives and benefits	
Green buildings and residential/working sites	Building, retrofitting and development of green buildings and residential/working sites in terms of GHG emissions, no additional energy input from outside, the prevention of pollution, biodiversity and mobility - Assets located in Zug/Risch Rotkreuz, CH.	<p>Climate action: with an overall goal to operate the portfolio with 100% of renewable energy and without CO2-emissions.</p> <p>Responsible consumption and production: use of materials low in pollutants and renewable materials.</p> <p>Biodiversity Protection: development of green city spaces with 50% of local plants and 80% of local trees.</p> <p>Sustainable mobility: optimize connections to local transport system; provide car sharing and -pooling options.</p>	<p>The Eligible Assets category is clearly defined.</p> <p>The associated environmental objectives are clearly defined, relevant.</p> <p>The expected environmental benefits from the Eligible assets have been identified although partially precise due to the lack of quantitative targets. The Issuer has committed they will be assessed and quantified by an external independent party.</p> <p>An area of improvement is to quantify these objectives and precise baseline years.</p>

In addition, the Eligible Categories are likely to contribute to four of the United Nations’ Sustainable Development Goals (“SDGs”), namely : Goal 7. Affordable and Clean energy, Goal 11. Sustainable Cities and Communities, Goal 12. Responsible Consumption and Production and Goal 13. Climate Action.



Eligible Green Assets	UN SDGs identified	UN SDGs targets
Green buildings and residential/ working sites	SDG 7. Affordable and Clean Energy	7.3
	SDG 11. Sustainable Cities and Communities	11.3, 11.6
	SDG 12. Responsible Consumption and Production	12.2
	SDG 13. Climate Action	NA

Process for Projects Evaluation and Selection

The process for projects’ evaluation and selection is clearly defined but partially formalized. We consider that the process is reasonably structured, transparent and relevant.

• The evaluation and selection of Eligible Assets appear to be based on relevant internal expertise with well-defined internal roles and responsibilities:

- The Bond Team is led by the CFO and including employees of the controlling department.
- The Sustainability Meetings cover recent topics and developments with employees from the department of project development, communication and project managers or topic specific experts – e.g. energy- and building technology as well as two members of the Zug Estate management.
- Involved people in the process are relevant, including employees from the department of project development, energy- and building technology, controlling and the management.

• The evaluation and selection of Eligible Assets is reasonably structured – The Bond Team evaluates and confirms assets compliance with eligibility criteria.

- This pre-selection of Eligible Assets to be financed by the Green Bond proceeds is made by the Bond Team and is approved within the Sustainability Meetings that take place regularly (approx. once a month).
- Possible new selection criteria – contributing to the sustainability objectives and in line with the overall Zug Estates’ strategy, e.g. reduction of waste or water use – are discussed within the Sustainability Meetings. Input for priorities comes from stakeholder via different channels (Sustainability Forum, politics, consultations, costumers). In the case of selection of new criteria, Zug Estates has committed to make them validated by an external reviewer to assess their relevance and compliance with the GBP.
- All investments that have been at the Suurstoffi site yet do contribute to the sustainability objectives and have been selected according to the same selection principles.

- The verification and traceability is ensured throughout the process:
 - Each Eligible Asset has been documented and selected based on visible criteria, including the confirmation of its eligibility during the Sustainability Meetings (that take place approximately once a month). The list of Eligible Assets has been established by a dedicated Bond Team and will be made available when announcing the issuance on Zug Estates' website.
 - Post issuance, compliance with the Internal Report will be reviewed annually during a specific Sustainability Meeting and will be audited by the internal audit office, until the complete allocation of the proceeds, and as necessary thereafter in the event of material developments.

The process relies on explicit and relevant eligibility criteria.

- Use of proceeds criteria: based on the definition of the Eligible Assets' category and defined in line with the Zug Estates' strategic priorities.
- The proceeds will only be used to finance projects that contribute to:
 - reduction of energy use or
 - reduction of GHG emissions or
 - use of renewable materials low in pollution or
 - biodiversity and green city spaces or
 - sustainable mobility

The identification of environmental and social risks associated to the Eligible Assets is good. Processes and appropriate measures have been implemented to manage all these environmental risks and most of these social risks.

- ESG factors in assets management are structured in Zug Estates' overall process for contracting, environmental standards and controlling, supporting services and including local communities. External audits are conducted on energy use, GHG emissions and biodiversity.
 - Environment: The integration of environmental factors in the assets management (energy use, biodiversity etc.) is considered good for all assets since it is included in the general contracting process (Code of Conduct) and procurement process (tenders) of Zug Estates. The implementation of eco-design and an environmental management system is considered advanced. Indicators, contribution to the strategic objectives (GHG emissions, energy use, biodiversity) will be examined by external monitoring audits, checked during the lifetime of the project and after the end of the projects. The Company's implementation of minimizing consumptions at construction and operation phases, minimizing outputs at construction and operation phases and energy efficiency of the buildings and GHG emissions is considered good.
 - Areas of improvement include the implementation of process and measures to ensure the responsible disposal of equipment and end of life management.
 - Social: The integration of social factors and the respect of fundamental Human and Social rights in the assets management (labor rights, no-discrimination etc.) are considered good for all assets since are included in the general contracting process (Code of Conduct) and procurement process (tenders) of Zug Estates. Additionally, Zug Estates supports participation, communication and information of the local community via a Suurstoffi app, community projects (e.g. Urban Gardening) and cultural events on the Suurstoffi site: its performance on the management of social impacts on the impacted communities and the promotion of local economic development and social insertion is considered good.
 - Areas of improvement include integrating social aspects into procurement process and requirements for contractors especially on the ILO-Standards as well as on health and safety requirements.
 - Governance of the projects (business ethics and integrity): Guidelines for offer submission are in place, defining the procurement process. Compliance with law, fairness, no-corruption, no-bribery and no conflicts of interests are included in the Code of Conduct. Zug Estates integrated a feedback system during procurement and project lifetime for better communication with the contractors and uses BIM-Methodologies and -Software for the optimization of the project management including all involved parties. Overall, the Company's performance on integrating business ethics and audit & internal risks in its management policies is considered advanced.

Management of Proceeds

The rules for the management of proceeds are clearly defined. We consider that they would enable a transparent and documented allocation process.

- The Issuer commits to credit the net proceeds of the Green Bond to a sub-account or to a sub-portfolio in a formal internal process linked to the issuer's investment operations for Eligible Assets managed by the controlling department.
 - Zug Estates will allocate the Green Bond proceeds towards Eligible Assets directly after the issuance of the Bond.
 - Zug estates has committed that they will not do temporary placements as the Green Bond proceeds will be directly allocated after the issuance of the Bond.
 - The proceeds will be tracked and documented within in the processes for transactions and liquidity planning. Disbursements will be validated collectively during an annual, specific Sustainability Meeting and represented in the annual Sustainability Report.
- All the management of proceeds will be reviewed annually by an internal and an external auditors and will be reported to the Board of Directors.
- In case of project ceases to comply with eligibility criteria or in case of project divestment, the Issuer commits to replace this asset with another Eligible Asset selected by the Green Bond Team within a 24 months period. An ad hoc report will be provided to investors to transparently disclose the potential changes in the Bond portfolio.

Monitoring & Reporting

The reporting commitments and process appear to be good, covering both the funds allocation and environmental benefits of the Eligible Assets (outcomes and impacts). We consider that the selected environmental and social reporting indicators are overall relevant, however the reporting lacks of indicator's units and baselines to ensure the monitoring of environmental and social benefits.

The process for monitoring, data collection, consolidation, and reporting are clearly defined and formalized in the Internal Report.

This process relies on relevant internal and external expertise:

- External, independent institutions are in charge of collecting the identified information from Zug Estates, energy suppliers or tenants.
 - A first consolidation will be provided by the external institutions, notably to the people responsible for project or the topic (energy use, GHG emissions, biodiversity etc.).
 - The Bond Team will aggregate the indicators and draft the Bond Report as a part of the Sustainability Report in cooperation with the communication department.

The Issuer has committed to perform its reporting through a dedicated annual report or within its Sustainability Report available on its website. The Issuer has also committed that the reporting will be a consolidation at portfolio level and will be made publicly available on its website.

Zug Estates has identified reporting indicators and selected calculation methodology based on both internal and external expertise. The selected reporting indicators related to the fund allocation and the environmental benefits are overall relevant for the defined Eligible Assets category.

- Use of proceeds:
 - List of financed assets with description of exemplary investments,
 - amounts invested and associated Zug Estates' quotas/shares at project level, annually and up to the complete allocation of Bond proceeds, and as necessary thereafter in the event of material developments.
- Environmental benefits:

- Outputs and outcomes: annual estimates and/or assessment of major outputs and outcomes disclosed at project level, annually and up to the complete allocation of Bond proceeds, and as necessary thereafter in the event of material developments.
- Impacts: annual estimates of ex-post impacts based on specific indicators developed by Zug Estates along with external experts, disclosed at project level annually and up to the complete allocation of Bond proceeds, and as necessary thereafter in the event of material developments.

Eligible Category	Environmental benefits indicators	
	Outputs and outcomes	Impact Indicators
Green buildings and residential/ working sites	<ul style="list-style-type: none"> - Primary energy consumption - CO2e caused by heating/hot water - Energy savings - Electricity (general/tenants) - CO2e caused by Electricity similarly - Use of materials low in pollutants (tons, quality) - Use of renewable materials (tons, quality) - Share of site that is certified as “natural” by an external organization (foundation for nature and economy) 	<ul style="list-style-type: none"> - Estimated annual GHG emissions avoided (for assets under construction) - Energy savings (KWh saved) - % of portfolio that uses 100% renewable energy

Area of improvement includes to report the environmental benefits accordingly to the share of the total cost of the eligible projects financed exclusively by the Green Bond proceeds.

For all Eligible Assets, Zug Estates may integrate additional qualitative or quantitative indicators as considered appropriate to disclose relevant performances or details on assets management.

The Issuer has committed to perform its reporting on calculation methodology and assumptions through their dedicated annual report or within its Sustainability Report available on its website.

Reporting on allocations will be verified by annual internal and external independent audits, input and output indicators will be evaluated by external independent institutions.

The issuer commits to evaluate a plan with the University of Luzern on how additional environmental and social benefits could be measured, in particular concerning biodiversity (development of green city spaces) and mobility (optimize connections to local transport system; provide car sharing and pooling options).

Area of improvement includes to define indicators units and baselines.

METHODOLOGY

In imug / Vigeo Eiris' view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organization, activity or transaction. In this sense, Vigeo Eiris writes an opinion on the Issuer's Corporate Social Responsibility as an organization, and on the process and commitments applying to the intended issuance.

Vigeo Eiris' methodology for the definition and assessment of the corporate's ESG performance is based on criteria aligned with public international standards, in compliance with the ISO 26000 guidelines, and is organized in 6 domains: Environment, Human Resources, Human Rights, Community Involvement, Business Behaviour and Corporate Governance. Our evaluation framework of the material ESG issues have been adapted, based on our generic Financial Services - Real Estate's ESG assessment frameworks and on specific issues considering the Issuer's business activity.

Our research and rating procedures are subject to internal quality control at three levels (analysts, heads of cluster sectors, and internal review by the audit department for second party opinions) complemented by a final review and validation by the Direction of Methods. Our SPO are also subject to internal quality control at three levels (consultants in charge of the mission, Production Manager, and final review and validation by the Direction of Sustainable Finance and/or the Direction of Methods. A right of complaint and recourse is guaranteed to all companies under our review, following three levels: first, the team linked to the company, then the Direction of Methods, and finally Vigeo Eiris' Scientific Council.

All employees are signatories of Vigeo Eiris' Code of Ethics, and all the consultants have also signed its add-on covering financial rules of confidentiality.

Part I. ISSUER

The ESG performance of the Issuer has not been assessed following the complete process of rating and benchmark developed by Vigeo Eiris. In this SPO, the assessment has been limited to the integration of ESG factors in the Issuer's commitments and strategy, i.e. the content, visibility and ownership of its ESG policies.

Integration of ESG factors in the Issuer's commitments and strategy

Zug Estates' integration of ESG factors in the Issuers' commitments and strategy has been assessed by imug under Vigeo's supervision on the basis of its:

- Leadership: relevance of the commitments (content, visibility and ownership).

Management of stakeholder-related ESG controversies

A controversy is an information, a flow of information, or a contradictory opinion that is public, documented and traceable, allegation against an Issuer on corporate responsibility issues. Such allegations can relate to tangible facts, be an interpretation of these facts, or constitute an allegation on unproven facts.

Vigeo Eiris reviewed information provided by press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organizations). Information gathered from these sources is considered as long as they are public, documented and traceable.

imug provides an opinion on companies' controversies risks mitigation based on the analysis of 3 factors:

- Frequency: reflects for each ESG challenge the number of controversies faced. At corporate level, this factor reflects on the overall number of controversies faced and scope of ESG issues impacted (scale: Isolated, Occasional, Frequent, Persistent).
- Severity: the more a controversy will relate to stakeholders' fundamental interests, will prove actual corporate responsibility in its occurrence, and will have adverse impacts for stakeholders and the company, the highest its severity. Severity assigned at corporate level will reflect the highest severity of all cases faced by the company (scale: Minor, Significant, High, Critical).
- Responsiveness: ability demonstrated by an Issuer to dialogue with its stakeholders in a risk management perspective and based on explanatory, preventative, remediating or corrective measures. At corporate level, this factor will reflect the overall responsiveness of the company for all cases faced (scale: Proactive, Remediate, Reactive, Non- Communicative).

The impact of a controversy on a company's reputation reduces with time, depending on the severity of the event and the company's responsiveness to this event. Conventionally, Vigeo Eiris' controversy database covers any controversy with Minor or Significant severity during 24 months after the last event registered and during 48 months for High and Critical controversies.

Involvement in controversial activities

15 controversial activities have been analysed following 30 parameters to verify if the company is involved in any of them. The company's level of involvement (Major, Minor, No) in a controversial activity is based on:

- An estimation of the revenues derived from controversial products or services.
- The precise nature of the controversial products or services provided by the company.

Part II. ISSUANCE

The Green Bond has been evaluated by imug under Vigeo Eiris according to the GBP 2018 and on Vigeo Eiris' methodology based on international standards and sector guidelines applying in terms of ESG management and assessment.

Use of proceeds

The definition of the Eligible Projects and of their sustainable objectives and benefits are a core element of Green/Social/Sustainable Bonds or Loans standards. Imug evaluates the definition of the Eligible Categories, as well as the definition and the relevance of the aimed sustainability objectives. We evaluate the definition of the expected benefits in terms of assessment and quantification. In addition, we evaluate the potential contribution of Eligible Projects to the United Nations Sustainable Development Goals' targets.

Process for evaluation and selection

The evaluation and selection process has been assessed by imug under Vigeo Eiris' supervision regarding its transparency, governance and relevance. The eligibility criteria have been assessed regarding their explicitness and relevance vs. the intended objectives of the Eligible Projects. The identification and management of the ESG risks associated with the Eligible Projects are analysed based on material issues considered in Vigeo Eiris' ESG assessment methodology based on international standards and sector guidelines applying in terms of ESG management and assessment.

Management of proceeds

The rules for the management of proceeds and the allocation process are evaluated by imug under Vigeo Eiris' supervision regarding their transparency, coherence and efficiency.

Reporting

Monitoring process and commitments, Reporting commitments, reporting indicators and methodologies are important to enable a transparent reporting on the proceeds allocation and tracking, on the sustainable benefits (output and impact indicators) and on the responsible management of the Eligible Projects financed by the issuance. imug has evaluated the reporting Internal Report regarding its transparency, exhaustiveness and relevance.

IMUG/VIGEO EIRIS' ASSESSMENT SCALES

Performance evaluation		Level of assurance	
Advanced	Advanced commitment; strong evidence of command over the issues dedicated to achieving the objective of social responsibility. Reasonable level of risk management and using innovative methods to anticipate emerging risks.	Reasonable	Able to convincingly conform to the prescribed principles and objectives of the evaluation framework
Good	Convincing commitment; significant and consistent evidence of command over the issues. Reasonable level of risk management.	Moderate	Compatibility or partial convergence with the prescribed principles and objectives of the evaluation framework
Limited	Commitment to the objective of social responsibility has been initiated or partially achieved; fragmentary evidence of command over the issues. Limited to weak level of risk management.	Weak	Lack or unawareness of, or incompatibility with the prescribed principles and objectives of the evaluation framework
Weak	Commitment to social responsibility is non-tangible; no evidence of command over the issues. Level of insurance of risk management is weak to very weak.		

Vigeo Eiris is an independent international provider of environmental, social and governance (ESG) research and services for investors and public & private organizations. We undertake risk assessments and evaluate the level of integration of sustainability factors within the strategy and operations of organizations.

Vigeo Eiris offers a wide range of services:

- ▶ **For investors:** decision making support covering all sustainable and ethical investment approaches (including ratings, databases, sector analyses, portfolio analyses, structured products, indices and more).
- ▶ **For companies & organizations:** supporting the integration of ESG criteria into business functions and strategic operations (including sustainable bonds, corporate ratings, CSR evaluations and more).

Vigeo Eiris is committed to delivering client products and services with high added value: a result of research and analysis that adheres to the strictest quality standards. Our methodology is reviewed by an independent scientific council and all our production processes, from information collection to service delivery, are documented and audited. Vigeo Eiris has chosen to certify all its processes to the latest ISO 9001 standard. Vigeo Eiris is an approved verifier for CBI (Climate Bond Initiative). Vigeo Eiris' research is referenced in several international scientific publications.

With a team of more than 240 experts of 28 different nationalities, Vigeo Eiris is present in Paris, London, Brussels, Milan, Montreal, Hong Kong, Casablanca, Rabat, Santiago.

The Vigeo Eiris Global Network, comprising 4 exclusive research partners, is present in Brazil, Germany, Israel and Japan.

imug | rating is one of the leading German sustainability rating agencies and the German-speaking address for tailor-made sustainability research. In 1995, imug emerged from the imug institute of the University of Hanover. To date, 39 employees provide consultancy and research services in the area of Corporate Social Responsibility (CSR), Socially Responsible Investment (SRI), market research and marketing.

imug rating has been active in the market for sustainable financial assets for more than 20 years - our references include major asset managers as well as church and environmental banks as well as institutional investors and NGOs. For our clients we provide high quality standards and excellent customer service.

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