

Second-Party Opinion

# Green Revolving Equity, GmbH (GRE)

## Green Bond

### Evaluation Summary

Sustainalytics is of the opinion that the Green Revolving Equity, GmbH (GRE) Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018. This assessment is based on the following:



**USE OF PROCEEDS** The eligible category for the use of proceeds – Renewable Bioenergy – is aligned with those recognized by the Green Bond Principles 2018. Sustainalytics considers the eligible category to have positive environmental impact and to advance the UN Sustainable Development Goals, specifically SDG7 (Affordable and Clean Energy) and SDG12 (Responsible Consumption and Production).



**PROJECT EVALUATION / SELECTION** GRE, as the parent company, has a dedicated committee for project selection and evaluation that involves site selection and assessment (including technical) and planning and standardization of commissioning process for facilities. All projects will be reviewed and approved by the Güssing Group’s Partner and Managing Director, receiving final approval from the Güssing Group’s CEO and Chairman. Sustainalytics considers project selection process, which includes C-level involvement, to be in line with market best practice.



**MANAGEMENT OF PROCEEDS** GRE will manage and track the net use of proceeds through an internal account. Pending allocation, the net proceeds will remain in the GRE’s bank account. This is in line with market practice.



**REPORTING** GRE intends to publish an annual statement of the Notes, until full allocation. The allocation reporting will include project type, capacity, amount of funding and location for each bond, as well as relevant impact metrics, where feasible. Sustainalytics views GRE’s allocation and impact reporting as aligned with market practice.

<b>Evaluation date</b>	May 2019
<b>Issuer Location</b>	Vienna, Austria

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## Introduction

Under GRE, Güssing Renewable Energy GmbH (“GREG”, the “company”) was founded in 2009 as a subsidiary of Güssing Renewable Energy International Holding GmbH (“Güssing Group”). It has a target of commercially scaling the Dual Fluidized Bed (DFB) steam gasification technology. Since its inception with the world’s first commercial-scale facility of its kind in Güssing, Austria, the company is scaling up the technology in the European market. Other regions where the company built and commissioned the facility with its partners include Thailand, USA, Serbia, and India. The company is a wholly owned subsidiary of the Green Revolving Equity, GmbH (GRE) that has been established as a special purpose entity to make investments in waste-to-energy projects through bonds issuances, therefore, financing renewable energy in various countries, including Austria, Thailand and India.

GRE has developed the GRE Green Bond Framework (the “Framework”) under which it may issue Notes and use the proceeds to finance/refinance, in whole or in part, future/existing Eligible Green Projects. The Framework defines eligibility criterion in the following area:

Renewable Bioenergy:

- Investment in development, construction, and operation of new bioenergy generation facilities, where 100% of the electricity and heat and/or biofuels are derived from waste biomass and/or non-food agricultural residues.
- R&D and demonstration facility.

GRE engaged Sustainalytics to review the Green Revolving Equity, GmbH (GRE) Green Bond Framework, dated April 2019, and provide a second-party opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2018 (GBP).<sup>1</sup> This Framework has been published in a separate document.<sup>2</sup>

As part of this engagement, Sustainalytics held conversations with various members of the GRE’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the GRE’s green bonds. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of GRE Green Bond Framework and should be read in conjunction with that Framework.

<sup>1</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

<sup>2</sup> GRE Green Bond Framework will be available at: <http://gussingcleanenergy.com/>

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the GRE Green Bond Framework

#### Summary

Sustainalytics is of the opinion that GRE Green Bond Framework is credible and impactful, and aligns with the four core components of the GBP 2018. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
  - The use of proceeds category – Renewable Bioenergy – is recognized as impactful by the GBP 2018. The Eligible Green Projects in this category will provide meaningful environmental contributions.
  - The Renewable Bioenergy category will include development, construction, and operation of new bioenergy generation facilities, as well as R&D and demonstration facility expenses<sup>3</sup> (see Appendix 1 for additional details on current Eligible Green Projects). GRE will be promoting the development of bioenergy projects in consideration of registering under the Clean Development Mechanism (CDM) of the Kyoto Protocol.<sup>4</sup>
  - The Framework states that the biomass feedstocks for bioenergy conversion in Eligible Green Projects only include wastes and/or non-food agricultural residues. Sustainalytics recognizes that dual-fluidized bed (DFB) gasification process will release flue gas; however, the carbon content of the gas is sourced from waste matter that would otherwise decompose naturally and be released freely into the atmosphere, and the majority of carbon dioxide will be recycled back into the system at various stages of operation.
  - Sustainalytics recommends that GRE consider measures to separate recyclable materials (such as plastics) from the waste feedstocks moving into the DFB gasification process in order to reduce the negative impact of carbon emissions. Nevertheless, Sustainalytics believes that GRE's waste-to-energy conversion will generate significant environmental benefits, including (i) generation of bioelectricity with very-low lifecycle GHG emissions (<100 gCO<sub>2</sub>e/kWh),<sup>5</sup> (ii) replacement of fossil fuels (such as conventional natural gas) with bio-synthetic gas (bio-SNG), FT fuels,<sup>6,7</sup> and/or hydrogen produced as byproducts, and (iii) reduction of waste from landfills and/or use of combustible and non-recyclable wastes (such as refused derived fuel).
  - Some proceeds will be used to finance operational expenditures (OPEX), such as operations of bioenergy facilities as well as the demonstration project. Sustainalytics believes that such expenditures will be important to positively contribute to environmental impacts, especially by scaling the DFB gasification technology with further application of producer gas, such as through biofuels and hydrogen production. GRE has confirmed that it is able to monitor such expenditures and can allocate these expenditures to eligible projects, verifying that OPEX is directly tied to eligible and impactful projects.
  - The exclusionary criteria include the following: biomass derived from sources that compete with food production or degrade terrestrial carbon pools; biomass derived from land previously cultivated or is considered arable; biomass produced from dedicated production out of arable land; and the development, construction and/or operation of fossil-fuel co-fired bioenergy generation facilities. Sustainalytics is of the opinion that these exclusions strengthen the Framework.
- Project Evaluation and Selection:

<sup>3</sup> Sustainalytics recognizes that GRE has committed to allocation reporting on a project-basis, and GRE has confirmed to use majority of proceeds towards bioenergy generation facilities and demonstration facility (with minor investment in biomass R&D).

<sup>4</sup> The CDM, as defined in article 12 of the Kyoto Protocol, allows a country with an emission-reduction commitment under the Kyoto Protocol to implement an emission-reduction project in developing countries. These projects are then eligible to earn Certified Emission Reduction (CER) credits, each of which is equivalent to one tonne of carbon dioxide. These CER credits are then traded in carbon markets.

<sup>5</sup> GRE has confirmed to Sustainalytics that the electricity generated as the major output of its Eligible Green Projects has a very-low lifecycle GHG emissions (<100 gCO<sub>2</sub>e/kWh) with potential for negative carbon emission with carbon recycling.

<sup>6</sup> Liquid biofuels are produced from a catalytic conversion ("Fischer-Tropsch" reaction) of synthetic gas, primarily carbon monoxide and hydrogen, derived from biomass gasification process. FT biofuels, such as FT diesel, serve as an attractive clean and carbon neutral transportation fuels with the purpose of the replacement of conventional fossil-fuels.

<sup>7</sup> GRE has confirmed through its Framework that biofuels will also have very-low lifecycle GHG emissions achieving at least 80% reduction over fossil fuel comparator defined for biomethane under the EU RED II Directive: [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016PC0767R\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016PC0767R(01)&from=EN)

## Green Revolving Equity, GmbH (GRE) Green Bond

- GRE has a dedicated committee for project selection and evaluation that involves site selection and assessment (including technical), and planning and standardization of commissioning process for facilities.
- All projects will be reviewed by GRE's Partner and Managing Director, followed by the final approval from the CEO. Sustainalytics considers project selection process, which includes C-level involvement, to be in line with market best practice.
- Management of Proceeds:
  - GRE will manage and track the net use of proceeds through an internal account. Pending allocation, the net proceeds will remain in the GRE's bank account. This is in line with market practice.
- Reporting:
  - GRE intends to publish an annual statement of the Notes, until full allocation. Sustainalytics views the Fund's allocation and impact reporting as aligned with market practice.
  - The allocation reporting will include project type, capacity, amount of funding and location for each GRE's green bond.
  - The impact reporting may include, where feasible and applicable, qualitative and quantitative indicators including reduction in greenhouse gas (GHG) emissions achieved.

### Alignment with Green Bond Principles 2018

Sustainalytics has determined that the GRE Green Bond Framework aligns to the four core components of the GBP 2018. For detailed information please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form.

## Section 2: Sustainability Performance of the Issuer

### Contribution of the Framework to GRE's sustainability strategy

Sustainalytics is of the opinion that GRE has demonstrated a commitment to bioenergy production through its biomass waste-to-energy facility that utilizes the (thermochemical) dual-fluidized bed gasification<sup>8</sup> process.

The thermochemical biomass gasification allows for partial oxidation of carbon-rich waste materials and non-food agricultural residues to generate producer gas (primarily, a mixture of carbon monoxide and hydrogen) for the production of electricity, heat, and/or biofuels (such as synthetic natural gas, Fischer-Tropsch fuels, methanol, and hydrogen).

GRE's process<sup>9</sup> also takes "carbon containing debris products and recycles it into useable fuel components and/or energy," while reducing community dependency on carbon-intensive energy or fuel sources. Güssing Renewable Energy provides planning, design, construction, operation and sale of customized systems to scale up the technology for bioenergy production with several licensing models.

Considering the above, Sustainalytics is of the opinion that GRE's overall strategy to support low-carbon energy production demonstrate the importance it places on achieving positive environmental and social impacts. Sustainalytics also believes that GRE's Framework is aligned with its overall sustainability efforts and can support its commitment to bring energy self-sufficiency to the communities.

### Well positioned to address common environmental and social risks associated with the projects

The bioenergy facilities will have positive environmental benefits related to the use of biomass derived from wastes and production of (primarily) electricity, as well as heat and/or biofuels. Nevertheless, the development and construction of such facilities have environmental and social risks, including lack of pollution prevention and control, health and safety, and community support. GRE confirmed to have procedures in place, at both the project level and project-portfolio level, to mitigate the aforementioned risks.

<sup>8</sup> Dual-fluidized bed gasification is a process consisting of: (i) a gasification zone with steam as an input, that is generated from waste heat of the process, and the producer gas as a final output, and (ii) a combustion zone which is fluidized with air and delivers the heat for gasification zone through circulating bed material. Status report on thermal biomass gasification in countries participating in IEA Bioenergy Task 33:

[www.ieatask33.org/app/webroot/files/file/2016/Status\\_report.pdf](http://www.ieatask33.org/app/webroot/files/file/2016/Status_report.pdf)

<sup>9</sup> Güssing Renewable Energy, Carbon Recycling: <http://gussingcleanenergy.com/carbon-recycling/>

At the project level, GRE confirmed to use waste biomass for the dual-fluidized bed gasification process and conversion into electricity, and heat and/or biofuels in all Eligible Green Projects. GRE has confirmed to Sustainalytics that the Eligible Green Projects have and/or will obtain all applicable and necessary environmental permits, approvals and authorization from the regulatory authorities. Overall, on a project-portfolio level, GRE built partnerships with local governments, local communities, industry partners and academic institutions to consult and/or engage at relevant stages of project development, construction and operation.

Based on the environmental approvals and necessary assessments at the project level, as well as consultation on a project-portfolio level, Sustainalytics is of the opinion that GRE is well-positioned to mitigate the risks associated with the development and construction of the bioenergy facilities.

### Section 3: Impact of Use of Proceeds

The eligible category is recognized as impactful by the GBP 2018.

#### Contribution of bioenergy to energy security and global ambitions of low-carbon economy

According to the International Energy Agency (IEA),<sup>10</sup> Europe has been a significant contributor to the bioenergy development, which is expected to be followed by growth in Asia. It is noted that global bioelectricity production needs to increase in order to align with the IEA's Sustainable Development Scenario (SDS)<sup>11</sup> target for bioenergy generation of approximately 872 TWh by 2020 (targeted increase of more than 58% over 2017 baseline) and 1,109 TWh by 2030 (targeted increase of more than 101% over 2017 baseline).<sup>10</sup>

GRE's Eligible Green Projects include those located in Austria, Thailand, and India. According to the New York Times,<sup>12</sup> in 2007, Güssing was "the first community in the European Union to cut carbon emissions by more than 90%" from 1995 levels while "producing heat, power and fuels from sawdust, corn and cooking oil." The town became a model community for other regions who wanted to become energy self-sufficient.<sup>13</sup>

Moreover, the Thai Alternative Energy Development (AEDP2015)<sup>14</sup> focused on promoting energy production through domestic renewable energy resources and considering its benefits associated with environmental and social dimensions of the community. According to the AEDP2015, the largest contribution to electricity and heat produced from renewable energy in 2036 is expected to come from biomass (along with biogas).<sup>15</sup> For the past decade, Thailand has been promoting biofuels to decrease its reliance on crude oil and associated GHG emissions.

Furthermore, the Government of India's Ministry of New and Renewable Energy (MNRE) promotes the conversion of wide variety of biomass into bioenergy for energy security, especially for meeting the needs of rural population, leveraging decentralized bioelectricity production, and utilizing advanced technologies such as fluidized bed gasification process,<sup>16</sup> including for sugar industry by-products as feedstocks (such as bagasse), which will also be used by GRE's Eligible Green Project in India.

Considering that GRE's Eligible Green Projects contribute positively towards policy ambitions related to environmental and/or social impacts outlined in various jurisdictions of GRE's operation, Sustainalytics believes that GRE will create significant environmental and social benefits.

<sup>10</sup> IEA, Bioenergy Power Generation: <https://www.iea.org/tcep/power/renewables/bioenergy/>

<sup>11</sup> The IEA's Sustainable Development Scenario (SDS) outlines "a major transformation of the global energy system." The SDS is developed to fully align with the goals of Paris Agreement and sets out how to deliver on three core energy-related objectives (relative to existing and announced policy ambitions): (i) to achieve universal access to energy (SDG17), (ii) to reduce severe health consequences of air pollution (part of SDG3), and (iii) to tackle climate change (SDG13). IEA, Sustainable Development Scenario: <https://www.iea.org/weo/weomodel/sds/>

<sup>12</sup> New York Times, 'Dead-end' Austrian town blossoms with green energy: [https://www.nytimes.com/2007/08/28/business/worldbusiness/28iht-carbon.4.7290268.html?\\_r=0](https://www.nytimes.com/2007/08/28/business/worldbusiness/28iht-carbon.4.7290268.html?_r=0)

<sup>13</sup> CleanTechnica, Güssing, Austria Powered Entirely By Renewable Energy: <https://cleantecnica.com/2013/10/16/renewable-energy-powered-austrian-town-gussing/>

<sup>14</sup> Ministry of Energy, Department of Renewable Energy Development and Energy Efficiency, AEDP2015: <http://www.eppo.go.th/images/POLICY/ENG/AEDP2015ENG.pdf>

<sup>15</sup> Iberglobal, Bioenergy in Thailand: [http://www.iberglobal.com/files/2017/tailandia\\_bioenergia.pdf](http://www.iberglobal.com/files/2017/tailandia_bioenergia.pdf)

<sup>16</sup> Government of India, Ministry of New and Renewable Energy, National Policy on Biofuels: [https://mnre.gov.in/sites/default/files/uploads/biofuel\\_policy\\_0.pdf](https://mnre.gov.in/sites/default/files/uploads/biofuel_policy_0.pdf)

### Importance of production of electricity, heat and/or biofuels from waste biomass

As described previously, upon gasification, bio-SNG releases GHG emissions such as carbon dioxide that, in majority, will be recycled back into the system at various stages of operation. However, the carbon content of the gas is sourced from waste matter that would otherwise decompose naturally and be released freely into the atmosphere. GRE has also confirmed to Sustainalytics that the bioelectricity and biofuels produced from waste and/or non-food agricultural residues have net zero carbon emission intensity (with carbon recycling back into the system) for Eligible Green Projects. In order to mitigate global warming impacts, including staying within the 2-degree scenario targeted by the Paris Agreement, it is necessary that power<sup>17</sup> and transportation<sup>18</sup> sector be decarbonized. Additionally, the global share of renewables in primary energy supply must be raised from 15% (2018) to 65% by 2050 while accelerating universal access to renewable energy.<sup>17</sup> In this context, Sustainalytics believes that GRE, by producing electricity as well as heat and/or biofuels with very-low (or negative) carbon intensity, will have significant positive environmental impacts.

### Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Bioenergy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

### Conclusion

GRE has developed the GRE Green Bond Framework under which it will issue multiple green bonds and use proceeds to finance the development, construction, and operation of new bioenergy facilities primarily to generate electricity from waste biomass with heat and/or biofuels as secondary products. Sustainalytics considers that the project funded by the green bond proceeds will provide positive environmental impacts through reductions in lifecycle greenhouse gas emissions (compared to fossil fuels) and the generation of heat and/or bio-SNG for conversion into low-carbon transportation fuel (FT fuels).

Sustainalytics believes that GRE's Framework is aligned with its overall sustainability strategy and that the environmental use of proceed category will also contribute to the advancement of the UN Sustainable Development Goals, specifically SDG7 (Affordable and Clean Energy) and SDG12 (Responsible Consumption and Production). Additionally, Sustainalytics is of the opinion that GRE has sufficient measures to identify, manage and mitigate environmental and social risks commonly associated with the Eligible Green Projects funded by the use of proceeds.

Overall, Sustainalytics is of the opinion that the GRE Green Bond Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles 2018.

<sup>17</sup> UNFCCC, Global Energy Interconnection Is Crucial for Paris Goals: <https://unfccc.int/news/global-energy-interconnection-is-crucial-for-paris-goals>

<sup>18</sup> ScienceDirect, "Road transport and CO2 emissions: What are the challenges?" <https://www.sciencedirect.com/science/article/pii/S0967070X17304262>

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## Appendices

### Appendix 1: Examples of Eligible Green Projects

- **Güssing Renewable Energy GmbH**  
Biorefinery Group in Güssing, Austria, will be using woodchips and general RDF: from forest maintenance, from contracted community coops (Biomasse Verbände), from the local waste management, from the community (sewer) sludge, and from the agriculture contracted Energy Crops.
- **Güssing Renewable Energy Thailand, Ltd.**  
Nongbua and Chayapoom in Thailand will be using woodchips, bark, cassava root, trimmings from public maintenance, contracted fast rotation Energy Crops (C4-grass), and local waste and debris.
- **Biorefinery India, Ltd.**  
For sugar mill and biomass gasification in a “poly-generation” biorefinery project, bagasse -- residue from milling sugarcane -- will be the main source of primary energy. “Juliflora”, a wooden weed and pest, as well as waste agricultural debris (palm fronds, rubber trees, etc.) will be available during the down season.
- **Construction of a 1 MW R&D and demonstration plant (including the development of the Bio Refinery Burgenland for the large-scale commercial demonstration of poly-generation of Biodiesel, FT-wax, Naphtha, and heat).**

## Appendix 2: Green Bond / Green Bond Programme - External Review Form

### Section 1. Basic Information

<b>Issuer name:</b>	Green Revolving Equity, GmbH (GRE)
<b>Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i></b>	Green Revolving Equity Fund, GmbH (GRE) Green Bond Framework
<b>Review provider's name:</b>	Sustainalytics
<b>Completion date of this form:</b>	May 2019
<b>Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i></b>	

### Section 2. Review overview

#### SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds        | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting                                    |

#### ROLE(S) OF REVIEW PROVIDER

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification   | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other <i>(please specify)</i> :                        |  |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

#### EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

### Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

#### 1. USE OF PROCEEDS

Overall comment on section (*if applicable*):

The eligible category for the use of proceeds – Renewable Bioenergy – is aligned with those recognized by the Green Bond Principles 2018. Sustainalytics considers the eligible category to have positive environmental impact and to advance the UN Sustainable Development Goals, specifically SDG7 (Affordable and Clean Energy) and SDG12 (Responsible Consumption and Production).

#### Use of proceeds categories as per GBP:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Renewable energy   | <input type="checkbox"/> Energy efficiency   |
| <input type="checkbox"/> Pollution prevention and control  | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation   | <input type="checkbox"/> Clean transportation  |
| <input type="checkbox"/> Sustainable water and wastewater management   | <input type="checkbox"/> Climate change adaptation   |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes                             | <input type="checkbox"/> Green buildings   |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other ( <i>please specify</i> ):  |

If applicable please specify the environmental taxonomy, if other than GBPs:

#### 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

GRE has a dedicated committee for project selection/evaluation that involves site selection and assessment (including technical), and planning and standardization of commissioning process for facilities. All projects will be reviewed by Partner and Managing Director, followed by the final approval from the CEO. Sustainalytics considers project selection process, which includes C-level involvement, to be in line with market best practice.

**Evaluation and selection**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives            | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories    |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available                  | <input type="checkbox"/> Other ( <i>please specify</i> ):  |

**Information on Responsibilities and Accountability**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other ( <i>please specify</i> ):  |   |

**3. MANAGEMENT OF PROCEEDS**

Overall comment on section (*if applicable*):

GRE will manage and track the net use of proceeds through an internal account. Pending allocation, the net proceeds will remain in the GRE's bank account. This is in line with market practice.

**Tracking of proceeds:**

- |  |
|--|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds   |
| <input type="checkbox"/> Other ( <i>please specify</i> ):  |

**Additional disclosure:**

- |  |  |
|--|--|
| <input type="checkbox"/> Allocations to future investments only                  | <input type="checkbox"/> Allocations to both existing and future investments   |
| <input type="checkbox"/> Allocation to individual disbursements                  | <input checked="" type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other ( <i>please specify</i> ):                      |

**4. REPORTING**

Overall comment on section (*if applicable*):

GRE intends to publish an annual statement of the Notes, until full allocation. The allocation reporting will include project type, capacity, amount of funding and location for each bond, as well as relevant impact metrics, where feasible. Sustainalytics views GRE's allocation and impact reporting as aligned with market practice.

**Use of proceeds reporting:**

- Project-by-project
  On a project portfolio basis  
 Linkage to individual bond(s)
  Other (*please specify*):

**Information reported:**

- Allocated amounts
  Green Bond financed share of total investment  
 Other (*please specify*):

**Frequency:**

- Annual
  Semi-annual  
 Other (please specify):

**Impact reporting:**

- Project-by-project
  On a project portfolio basis  
 Linkage to individual bond(s)
  Other (please specify):

**Frequency:**

- Annual
  Semi-annual  
 Other (please specify):

**Information reported (expected or ex-post):**

- GHG Emissions / Savings
  Energy Savings  
 Decrease in water use
  Other ESG indicators (please specify):

**Means of Disclosure**

- Information published in financial report
  Information published in sustainability report  
 Information published in ad hoc documents
  Other (please specify): annual statement to the Trustee for the Notes.  
 Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

**USEFUL LINKS** (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE****Type(s) of Review provided:**

- |  |  |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit                        | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other ( <i>please specify</i> ):            |  |

**Review provider(s):****Date of publication:****ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP**

- i. Second Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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