



# Veas AS

## Green Finance Second Opinion

18 August 2022

### Executive Summary

**Veas AS (Veas) is a limited liability company operating Norway's largest wastewater treatment plant, treating water from businesses and residential areas in Oslo, Bærum, Asker and Nesodden.** During operations, Veas is recovering resources in the form of heat, biogas and fertiliser. The volume of wastewater treated by Veas corresponds to wastewater from 867,000 people. Veas has approximately 100 employees and the owners are the municipalities of Oslo, Bærum and Asker.

**All the proceeds from the first bond issue will be spent on refinancing the upgrading of the treatment plant to remove more organic elements (by biological treatment).** This is a project in the category Wastewater management/ Aquatic biodiversity conservation. Proceeds from potential subsequent issuances may be allocated to refinancing older projects or financing new projects in one or several of the other framework categories: Renewable energy, Pollution prevention and control/Environmentally sustainable management of land use, Circular economy adapted products, production technologies and processes, or Green buildings.

We rate the framework **CICERO Dark Green** and give it a governance score of **Good**. Veas has ambitious targets for energy use and environmental impacts and aims to be a frontrunner in the wastewater treatment sector through e.g., several innovative development projects and aiming for treatment levels going beyond regulations. The investments under the framework mostly support long term solutions for pollution and climate change challenges, although it also allows for some lighter green investments in e.g., green buildings. Veas has a solid approach to climate resiliency issues and demand green solutions in all their projects.

### Strengths

**Veas' framework is key to secure a cleaner Oslofjord, and significant efforts were made by the issuer to reduce the emissions associated with the upgrading of its treatment plant.** The framework focuses on upgrading the current wastewater treatment facilities, connected to securing resilient operation of the sanitary system and the treatment of wastewater. During the design and construction phase of the upgrade, decisions were taken to reduce the associated emissions, including embodied emissions in building materials. The upgrades are needed to increase the extraction of organic materials, nitrogen and phosphorus from wastewater, which is needed to improve the environmental quality and biodiversity of the Oslofjord. Current regulations require removal of 70% of nitrogen and 90% of phosphorus. Veas has an aim to remove some 80% of the nitrogen in the treated water.

**Veas strives to use as much as possible of the extracted materials from the treated water, while seeking to develop innovative solutions to reduce greenhouse gas emissions.** Veas, as one of few treatment plants worldwide (perhaps the only one), uses the recovered nitrogen from wastewater to replace mineral fertilisers with

### SHADES OF GREEN



°CICERO  
Dark Green

### GOVERNANCE ASSESSMENT



### GREEN BOND AND LOAN PRINCIPLES

Based on this review, this framework is found to be aligned with the principles.



much higher greenhouse gas emissions. In addition, Veas is developing innovative solutions to reduce nitrous oxide emissions associated with nitrogen fertilisation. The framework also covers other elements of Veas' operations, including the generation of biogas from wastewater sludge; cleaning of wastewater sludge to be used as fertiliser, compost and other soil improvement products; production of commercial biogenic CO<sub>2</sub> and ammonium sulphate used as input in the production of renewable nitrogen fertilisers. In total, this represents a comprehensive system for securing sustainable treatment of wastewater.

### *Pitfalls*

**While wastewater treatment is necessary and beneficial to the environment (including climate change mitigation), the climate impacts of some of the eligible activities are difficult to assess due to lack of quantitative criteria in the framework.** Construction activities will normally lead to greenhouse gas emissions, including embodied emissions. This is somewhat mitigated by Veas' policies. For example, Veas informs us that for new administration buildings, all concrete must be low-emission concrete, that all transport to/from the construction site should strive to use biogas and that in the environment/quality weighting, consideration will be given for emission-free/low-emission solutions. While the development of fossil free machinery is still in its early stages, the municipality of Oslo, one of Veas' owners, has been an early mover in this field. CICERO Green is encouraged by Veas' commitment to ambitious emissions reductions targets.

**There is a risk of overestimating greenhouse gas emissions reductions/avoidance, as Veas plans to report on the basis of the assumptions that biogas, except for methane leakages from production, refining and distribution, has zero CO<sub>2</sub> emissions and replaces fossil diesel.** The zero-emission assumption may not necessarily be realistic due to the fact that biogas combustion will release CO<sub>2</sub> that may or may not be fully compensated by biomass uptake. Biogas may also replace other types of fuel than diesel. Still, biogas has far lower climate footprint than fossil alternatives. The reporting of impacts in the green buildings category is with reference to a 'standard (non-certified) office building'. This relates to energy intensities according to regulations at the time of construction of the buildings multiplied with the grid factor taken from the Nordic position paper (cf. footnote 2). This grid factor is meant to represent a European mix in the grid, a factor that tends to be higher than the local Norwegian grid factor. Hence the reported GHG emission reductions may be overestimated.



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# 1 Veas' environmental management and green finance framework

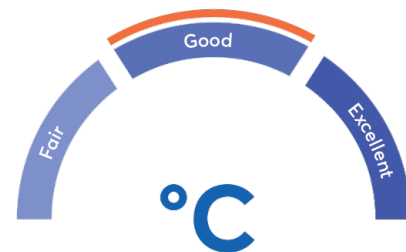
## Company description

Veas AS (Veas) is a limited liability company operating Norway's largest wastewater treatment plant treating water from businesses and from residential areas in Oslo, Bærum, Asker and Nesodden, recovering resources in the form of heat, biogas and fertiliser. The volume of wastewater treated by Veas corresponds to wastewater from 867,000 people. Veas has approximately 100 employees and an operating budget of about 300 million NOK annually. The owners are the municipalities of Oslo, Bærum and Asker.

## Governance assessment

Veas has clear and ambitious climate targets and strategies and is working on improving the current sustainability reporting. Climate and other environmental objectives seem to be mainstreamed in Veas' operations.

Veas has certified its operating systems and procedures according to NS-EN ISO 9001 (quality management) and 14001 (environmental management) to ensure that operations are conducted in accordance with proper standards.



The overall assessment of Veas' governance structure and processes gives it a rating of **Good**.

## Sector risk exposure

**Physical climate risks.** Increased risk of extreme precipitation and ensuing flooding under climate change may challenge the transport and treatment capacity of Veas, hence increasing the risk for overflow of untreated wastewater.

**Transition risks.** Due to the profound changes needed to limit global warming to 2°C, transition risk affects all sectors. Veas is exposed to transition risks from stricter energy efficiency requirement or stricter local rules imposing the use of fossil free construction machinery. On the other hand, stricter climate change policies can lead to increased demand for e.g., biogas from Veas.

**Environmental risks.** Overflow of untreated wastewater pose a considerable risk to all life in the Oslofjord, a fjord already under strong environmental pressure. In general, the water quality in the inner Oslofjord has improved since the 1970s, due to the development of treatment plants and systems for pipelines and wastewater. Among other things, this has led to better visibility in the water. Emissions of nutrients from households via the treatment plants still dominate the impact picture, but inputs from streams and rivers are also significant, and are likely to increase in the future with increased precipitation as a result of climate change. Wastewater in the overflow and discharge of boat septic to the fjord are also relevant impacts.



## Environmental strategies and policies

Veas has a zero vision for unwanted emissions from the business. This includes nutrients, environmental toxins, greenhouse gases, dust, noise and odours. Veas strives to protect health and the environment against the potential for damage to wastewater and take care of wastewater resources. Thus, Veas has as a target to remove more than 80% of the nitrogen from the wastewater. Current regulation and its environmental permit require 70% removal.

Veas' sustainability work is supported by a large number of internal development and research projects that in cooperation with external partners seek new and innovative solutions to the pollution and resource use challenges associated with wastewater treatment.

Veas' ambitions for the climate and energy can be summarised by the following targets:

- In 2022, Veas will be energy neutral, generating equal or more energy than they consume
- In 2024, Veas' business will be CO<sub>2</sub> neutral, when including the substitution effects of their products (e.g., liquid biogas for diesel)
- In 2030, Veas' business will generate 50% more energy than it consumes
- In 2030, Veas' business will bind more than 30% more CO<sub>2</sub> equivalents than it generates

The energy balance for Veas for 2021 shows a net energy use of 11.5 GWh.

Veas conducts an annual assessment of the sustainability impact of its operations. The findings are handled in Veas' management system for continuous improvement, where they are used to prioritise improvement measures, evaluate last year's measures and, if needed, to adjust the targets.

Veas estimates greenhouse gas emissions for scope 1-3 in accordance with the Greenhouse Gas (GHG) Protocol. The reporting covers both direct emissions and indirect emissions related to input factors, transport and the use of the products. Scope 1 emissions are dominated by emission of methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O) from wastewater treatment and biogas production (only methane), but also contains transport related emissions. These emissions are to be phased out, according to Veas. Scope 3 emissions dominates overall, mainly because of the footprint of chemicals used. In addition, Veas reports the emission savings achieved from the use of their products in a life cycle perspective, with the assumptions that they replace more climate harming alternatives. Note, however, that the reporting is not made public. In summary, Veas reports greenhouse gas emissions in 2021 as shown in the table below. Overall, the emissions were almost 20% below 2020 emissions, but with large uncertainties according to the issuer.

<i>2021 ktCO<sub>2</sub>e/year</i>	<i>Sewage treatment and sludge</i>	<i>Sewage transport</i>	<i>Total</i>	<i>Share</i>
<i>Scope 1</i>	6.2		6.2	24%
<i>Scope 2</i>	0.9	0.1	1.0	4%
<i>Scope 3</i>	18.7	0.3	19.0	73%
<i>Total</i>	25.7	0.4	26.2	100%
<i>Share</i>	98%	2%	100%	

Veas is still in an early phase in implementing a more systematic approach to sustainability and reporting. To be more systematic and meet the ambition to be a frontrunner for improving the sustainability in the sector, Veas is now conducting a larger project to set up the framework for the future sustainability. The goal is to conclude the project in 2022. As a part of this strategic process, Veas will also decide whether to report according to the guidelines of TCFD and other sustainability standards/protocols in the future.



For all construction projects Veas initiate, subcontractors and suppliers are required to establish a quality plan, describing all phases of a project from engineering and design to commissioning, taking into account laws and regulations as well as Veas' internal policies and procedures. Veas has established an internal procedure for supplier evaluation and selection, as well as ethical guidelines for the suppliers to ensure inter alia that social safeguards are in place and aligned with UN Global Compact's 10 principles and that considerations and care for the environment are made. Climate friendly solutions are being rewarded (weighting in tender assessment is 25-30%). Veas is, however, not setting strict requirements, but asks the supplier to describe their environmental standard.

Veas is well aware of risks associated with climate change and has considered impacts of sea level rise and flooding. The main risk is from increased occurrence and level of heavy precipitation, leading to direct outflow to Oslofjorden. Veas is increasing the use of data modelling for risk management and adding additional power lines for redundancy (to avoid outages of the facility) as mitigating actions, with the aim of reducing the number and total amount of combined sewer overflows.

### **Green finance framework**

Based on this review, Veas' framework is found to be aligned with the ICMA Green Bond Principles and LMA Green Loan Principles (2021). For details on the issuer's framework, please refer to the green finance framework dated August 2022.

#### *Use of proceeds*

For a description of the framework's use of proceeds criteria, and an assessment of the categories' environmental impacts and risks, please refer to section 2.

#### *Selection*

To ensure the transparency and accountability around the selection of green projects, Veas has established a "Green Finance Committee". This committee consists of members of the executive management team and is responsible for the evaluation and selection process. According to the issuer, Veas' Head of Strategy possesses highly relevant internal competence and will advise the Green Finance Committee. All decisions related to the inclusion of approved investments as eligible green projects will be made unanimously. Veas is not currently conducting life cycle analysis of projects, however, it has the ambition to do so in the future. According to the issuer, local environmental impacts and resistance are important factors in the selection process (wastewater treatment facilities are "always" controversial). One of Veas' values is "to be a good neighbour", so "not-in-my-back-yard" issues (NIMBY) are in their backbone for all new projects as well as in relation to the existing operation.

The Green Finance Committee also holds the right to exclude any green project already funded by green finance instruments. To ensure traceability, all decisions made by the Green Finance Committee will be documented and filed. The committee will be responsible for ensuring that Veas keeps a register of all green projects.

#### *Management of proceeds*

Green bond proceeds are tracked by the issuer. The Green Finance Committee will endeavour to ensure that the value of green projects always exceeds the total nominal amount of green bond outstanding. Unallocated proceeds will be held as cash and short-term money market instruments. To the extent possible the exclusions listed in the Use of Proceeds section also apply for such temporary holdings of net proceeds.

If a project already funded by green finance instruments is sold, or for other reasons loses its eligibility, it will be replaced by another qualifying green project as soon as practically possible.



## Reporting

Veas will make available an annual green finance report on its website. The first report will be available no later than 12 months after issuing a green bond. The Green Finance Committee will be responsible for the report. The report will include an allocation report and an impact report and will be published annually if there are green bonds outstanding or until full allocation.

The allocation report will include the following information:

- The nominal amount of green finance instruments outstanding, split between green bonds and green loans.
- Green projects that have been funded by green finance instruments.
- Amounts invested in each of the green project categories and the share of new financing versus refinancing.
- The amount of net proceeds awaiting allocation to green projects (if any).

The report will cover all bonds and loans and will not be linked to individual bonds. Veas will report separately large projects/investments but will accumulate/aggregate smaller investments and report these on a portfolio basis.

The impact report will, on a best effort basis, align with the portfolio approach described in “Handbook – Harmonized Framework for Impact Reporting” (June 2022)<sup>1</sup> where impact will be aggregated for each project category, and depending on data availability, calculations will be made on a best-efforts basis with transparent assumptions being applied. For projects under construction, calculations may be based on preliminary estimates.

The impact assessment may be based on the following metrics:

<i>Green Project category:</i>	<i>Indicator:</i>
<i>Wastewater management/ Aquatic biodiversity conservation</i>	Wastewater treatment facilities <ul style="list-style-type: none"> <li>• Annual absolute amount of wastewater treated, reused or raw/untreated wastewater avoided before and after the project (in m<sup>3</sup>/annum and p.e./annum* and as %)</li> <li>• Biological oxygen demand (BOD) reduction in discharged water before and after project (in %)</li> </ul>
<i>Renewable energy</i>	Production of biogas from sewage sludge <ul style="list-style-type: none"> <li>• Capacity of plant(s) constructed or rehabilitated (in MW)</li> <li>• Annual renewable energy generation (in MWh or GJ)</li> <li>• Annual GHG emissions reduced/avoided (in tonnes of CO<sub>2</sub>e/annum) based on the assumptions that the biogas will replace fossil diesel, and that biogas has zero CO<sub>2</sub> emissions</li> </ul>
<i>Pollution prevention and control/ Environmentally sustainable management of land use</i>	Treatment and reuse of sewage sludge for composting and soil improvement products. <ul style="list-style-type: none"> <li>• Annual absolute (gross) amount of raw/untreated sewage sludge that is treated for reuse as fertiliser, compost, and other soil improvement products (in tonnes of dry solids and in %)</li> <li>• Annual absolute amount of sludge that is reused for soil improvement products (in tonnes of dry solids)</li> </ul> Extraction of nitrogen from treatment and <ul style="list-style-type: none"> <li>• Annual absolute amount of nitrogen extracted from sewage sludge (in tonnes of dry solids)</li> </ul>

<sup>1</sup>[Harmonised-Framework-for-Impact-Reporting-Green-Bonds\\_June-2022-280622.pdf \(icmagroup.org\)](https://www.icmagroup.org/standards/aligned/aligned-standards/Harmonised-Framework-for-Impact-Reporting-Green-Bonds_June-2022-280622.pdf)



<i>Circular economy adapted products, production technologies and processes</i>	reuse of sewage sludge	<ul style="list-style-type: none"> <li>Annual absolute amount of fertilisers produced (in tonnes)</li> </ul>
	Extraction of biogenic CO <sub>2</sub>	<ul style="list-style-type: none"> <li>Annual absolute (gross) amount of biogenic CO<sub>2</sub> produced (in tonnes)</li> </ul>
	Extraction of ammonium sulphate	<ul style="list-style-type: none"> <li>Annual absolute (gross) amount of ammonium sulphate produced (in tonnes)</li> </ul>
<i>Green buildings</i>		<ul style="list-style-type: none"> <li>Annual GHG emissions reduced/avoided (in tonnes of CO<sub>2</sub>e/annum) based on measured CO<sub>2</sub> emissions per m<sup>2</sup> for the Green buildings vs emission per m<sup>2</sup> for a standard (non-certified) office building<sup>2</sup></li> </ul>

\* Population equivalent (1 p.e.) or 60 g of BOD

An independent auditor appointed by Veas will provide a limited assurance report confirming that an amount equal to the net proceeds has been allocated to green projects as defined in the green finance framework. The impact reporting will not be independently verified.

<sup>2</sup> The issuer states that when comparing the CO<sub>2</sub> emissions from the eligible green building with a standard building, the calculation will apply the grid factor recommended in the Nordic Position Paper on Green Bonds Impact Reporting, clause 22, page 20 (NPSI\_Position\_paper\_2020\_final.pdf (kuntarahoitus.fi)).






## 2 Assessment of Veas’ green finance framework

The eligible projects under Veas’ green finance framework are shaded based on their environmental benefits and risks, based on the “Shades of Green” methodology.

### Shading of eligible projects under the Veas’ green finance framework

- 100% of the proceeds from the first bond issue will refinance the upgrading of the treatment plant to allow for biological treatment – a project in the category Wastewater management/Aquatic biodiversity conservation. However, potential subsequent issuances may be allocated to refinancing older projects or financing new projects in one or several of the other categories.
- Proceeds from green finance instruments will not be used to finance investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defence, potentially environmentally negative resource extraction, gambling or tobacco.

Category	Eligible project types	Green Shading and considerations
<b>Wastewater management/ Aquatic biodiversity conservation</b> 	<ul style="list-style-type: none"> <li>• Development, construction, installation, operation, improvement, repair and maintenance of facilities, as well as related infrastructure, connected to securing resilient operation of the sanitary system and the treatment of wastewater to improve water quality and contribute to a cleaner Oslofjord.</li> </ul>	<b>Dark Green</b> <ul style="list-style-type: none"> <li>✓ Wastewater treatment and reuse of resources are clearly part of the long-term solution to achieve the green transition. The extraction of organic materials, nitrogen and phosphorus from wastewater is key in preventing damage to the Oslofjord. All proceeds from the first bond issue will be spent on refinancing the upgrading of the treatment plant to biological treatment in order to remove more nitrogen. Veas’ target for removal of nitrogen is more ambitious than their environmental permit (the target is 80% removal versus 70% required by regulations and permits).</li> <li>✓ The production of chemicals for use in water and wastewater treatment<sup>3</sup> accounts for a substantial greenhouse gas footprint, meaning that reducing chemicals is a measure to reduce greenhouse gas emissions from the treatment process. The issuer informs us that they are in dialogue with suppliers to minimize the climate footprint from chemicals. Scope 3 emissions from chemicals are part of the tendering process, according to the issuer. No fossil fuel-based equipment is financed under the framework.</li> </ul>

<sup>3</sup> The four main types of chemicals used in wastewater treatment are pH neutralisers, anti-foaming agents, coagulants and flocculants.



### Renewable energy



- Development, construction, installation, operation, improvement, repair and maintenance of facilities, as well as the related infrastructure, connected to the generation of biogas from wastewater sludge.

### Dark to Medium Green

- ✓ Sewage sludge can be considered a renewable energy source and can generate substantially lower GHG emissions than fossil fuels. These energy factories can also generate more energy than the plant itself needs to process and treat wastewater. For the same amount of energy, energy recovery from sewage sludge emits 58% less than natural gas and 80% less than hard coal and fuel oil<sup>4</sup>. This is good, but still not zero greenhouse gas emissions solution.
- ✓ Until 2020, Veas used biogas in powering and heating the wastewater treatment plant and the administration buildings. After the construction of the new refining plant was completed, the biogas has now been upgraded to liquid fuel for the transport sector. The fuel product is ISCC-certified according to sustainability criteria for renewable fuels.

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### Pollution prevention and control/ Environmentally sustainable management of land use



- Development, construction, installation, operation, improvement, repair and maintenance of facilities, as well as the related infrastructure, connected to treatment and hygienisation of wastewater sludge to be used as fertiliser in agriculture, as well as the production of compost and other soil improvement products.

### Medium to Dark Green

- ✓ The organic matter and nutrients removed from wastewater as sludge can be valuable resources. Using sewage sludge as biomass is likely to have a positive climate impact, limiting the use of more emissions intensive mineral fertilisers. In a 2050 future, fertilisers must not only be produced with significantly less emissions but also be coupled with effective means for reducing emissions and discharges related to the use of fertilisers.
- ✓ The produced fertilisers still contain nitrogen and their use in agriculture continues to cause emissions from spreading as well as run-off containing nitrogen. Veas is involved in a research project to minimise these emissions.

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<sup>4</sup> <https://www.mdpi.com/1996-1073/12/10/1927/pdf>



**Circular economy adapted products, production technologies and processes**

- Development, construction, installation, operation, improvement, repair and maintenance of facilities, as well as the related infrastructure, connected to production of commercial biogenic CO<sub>2</sub> and ammonium sulphate applied as an intermediate product for renewable nitrogen fertilisers.



**Dark Green**

- ✓ Veas' biogas production consists of 60% CH<sub>4</sub> and 40% CO<sub>2</sub>. Currently the CO<sub>2</sub> is vented to air. Biologically generated liquid CO<sub>2</sub> (biogen CO<sub>2</sub>) can however replace CO<sub>2</sub> production from fossil fuels. Biogen CO<sub>2</sub> has different areas of application, such as food production, in laboratories or in the health sector.
- ✓ Ammonium sulphate; (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, is an inorganic salt with a number of commercial uses. The most common use is as a soil fertiliser. The chemical inputs needed in its production have significantly lower associated emissions than those needed in the production of the currently produced ammonium nitrate.

**Green buildings**

- Construction, ownership and renovation of office buildings built according to Norwegian building codes of 2010 (TEK10) or 2017 (TEK17) and with BREEAM-NOR certification notation as "Excellent" or better, and specifically for renovated buildings a reduction in primary energy demand of at least 30%.



**Light to Medium Green**

- ✓ Building criteria are considered adequate but do not reflect the highest level of standards. In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with passive and plus house technologies becoming mainstream and the energy performance of existing buildings greatly improved through deep refurbishments.
- ✓ Refurbishment of existing buildings are often better than new constructions from a climate point of view but should ideally come with greater improvements in energy efficiency. IPCC recommends 50% energy efficiency improvements, and according to IEA, efficiency of building envelopes needs to improve by 30% by 2025 to be aligned with the Paris target.
- ✓ BREEAM-NOR covers a broad set of issues that are important to sustainable development. However, this certification alone does not ensure energy efficient buildings. This category can therefore potentially contain buildings that are not substantially better than current regulations energy wise and with high embodied emissions.
- ✓ The issuer should consider construction phase waste and emissions.

Table 1. Eligible project categories









## 3 Terms and methodology

This note provides CICERO Shades of Green’s (CICERO Green) second opinion of the client’s framework dated August 2022. This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client’s policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

### ‘Shades of Green’ methodology

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

Shading	Examples
 <b>Dark Green</b> is allocated to projects and solutions that correspond to the long-term vision of a low-carbon and climate resilient future.	 Solar power plants
 <b>Medium Green</b> is allocated to projects and solutions that represent significant steps towards the long-term vision but are not quite there yet.	 Energy efficient buildings
 <b>Light Green</b> is allocated to transition activities that do not lock in emissions. These projects reduce emissions or have other environmental benefits in the near term rather than representing low carbon and climate resilient long-term solutions.	 Hybrid road vehicles

The “Shades of Green” methodology considers the strengths, weaknesses and pitfalls of the project categories and their criteria. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised, including potential macro-level impacts of investment projects.

Sound governance and transparency processes facilitate delivery of the client’s climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green finance are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client’s governance processes: 1) the policies and goals of relevance to the green finance framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



### *Assessment of alignment with Green Bond Principles*

CICERO Green assesses alignment with the International Capital Markets' Association's (ICMA) Green Bond Principles. We review whether the framework is in line with the four core components of the GBP (use of proceeds, selection, management of proceeds and reporting). We assess whether project categories have clear environmental benefits with defined eligibility criteria. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed. The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the selection process. CICERO Green assesses whether net proceeds or an equivalent amount are tracked by the issuer in an appropriate manner and provides transparency on the intended types of temporary placement for unallocated proceeds. Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs.



# Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	VEAS Green Finance Framework draft 6	Veas' Green finance framework dated August 2022
2	R 4 - 2022 Vedlegg 1 Årsrapport 2021	Veas' Annual report 2021
3	Kvalitets- og miljøpolicy	Veas' Quality and environmental policy
4	Energipolicy og mål	Veas' Energy policy and targets
5	Prosedyre for kartlegging av miljøaspekter	Procedure for mapping environmental aspects
6	Etiske retningslinjer for leverandører	Ethical guidelines for suppliers
7	Krav til kvalitetsplan for leverandører	Requirements for quality plan for suppliers
8	Prosedyre leverandørevaluering	Procedure for vendor evaluation
9	Måldokument	Goal document
10	Beskrivelse av ledelsessystemet	Description of the management system
11	NS-EN ISO 9001 og 14001 sertifikat, Veas	NS-EN ISO 9001 og 14001 certificate, Veas
12	NS-EN ISO 9001 og 14001 sertifikat, Veas Marked AS	NS-EN ISO 9001 og 14001 certificate, Veas Marked AS
13	Konkurransesgrunnlag (FOA III)	Example of a tender document with requirements of suppliers.
14	Veas eget skyggeregnskap for klima 2020_rensket_inkl tiltak	Climate gas account for 2020



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15	Klimagassregnskap - Veas 2021_revidert	Revised climate gas account for 2021
16	Prosjekter og studier	List of development projects and studies

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## Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University, the International Institute for Sustainable Development (IISD) and the School for Environment and Sustainability (SEAS) at the University of Michigan.



- ★ **2021 Largest External Reviewer**, Climate Bonds Initiative Awards
- ★ **2020 External Assessment Provider Of The Year**, Environmental Finance Green Bond Awards
- ★ **2020 Largest External Review Provider In Number Of Deals**, Climate Bonds Initiative Awards
- ★ **2019 External Assessment Provider Of The Year**, Environmental Finance Green Bond Awards
- ★ **2019 Largest Green Bond SPO Provider**, Climate Bonds Initiative Awards
- ★ **2018 External Assessment Provider Of The Year**, Environmental Finance Green Bond Awards
- ★ **2018 Largest External Reviewer**, Climate Bonds Initiative Awards
- ★ **2017 Best External Assessment Provider**, Environmental Finance Green Bond Awards
- ★ **2016 Most Second Opinions**, Climate Bonds Initiative Awards