



Ferde AS

Green Bond Second Opinion

October 21, 2019

Ferde AS (“Ferde”) is a Norwegian regional toll collection and infrastructure financing company in West and South-West Norway. It manages toll collection following government consent and agreements with the Norwegian Public Roads Administration. The purpose of the regional toll collection companies is to use toll funds to finance infrastructure projects in their respective regions.

Eligible projects in Ferde’s green bond framework include trams and light rail transit lines, pedestrian and bicycle paths, and low-carbon transport lanes (for public, high-occupancy or electric vehicles). The aim of Ferde’s projects is to increase the capacity and energy efficiency of public transport and to improve the accessibility for bicycles and pedestrians, thereby reducing road traffic growth and carbon emissions related to transport. This aim should be seen against the backdrop of the 2012 initiative by the Norwegian government of zero growth in personal car transport in large cities.

Ferde’s green bond framework is detailed and provides an innovative way for investors to contribute to climate-friendly transport infrastructure projects. The transport sector is a key contributor to climate change and continued national and regional efforts to decarbonise the sector – in Norway and elsewhere- will be crucial going forward. The framework contains relevant impact indicators and a simple but transparent procedure for selecting projects.

Investors should be aware that as a financing entity, Ferde has limited potential to influence the design and running of projects. The impacts of the projects it is financing can arguably only be as good as the policies of its implementing partners. Climate is high on the agenda among these partners. However, particular concerns such as resiliency, as well as construction phase emissions and the availability of data for reporting purposes remain. Investors should be aware that some of the projects to be funded under the framework have been highly debated politically and that toll collection has become a contentious issue in Norwegian society in the past couple of years. The debate has centered around the level of the tolls as well as distributional aspects (in some regions households and businesses may end up being charged many times in the course of a day for what is considered basic transportation needs).

The framework includes both dark and medium shades of green. The majority of the proceeds will be allocated to rail transport, a category rated dark green. Based on an overall assessment including taking into account the good governance structure, the framework is rated **Dark Green**.

SHADES OF GREEN

Based on our review, we rate Ferde’s green bond framework **CICERO Dark Green**.

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in Ferde’s framework to be **Good**



GREEN BOND PRINCIPLES

Based on this review, this framework is found in alignment with the Green Bond Principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of Ferde's green bond framework dated October 2019. This second opinion remains relevant to all green bonds 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 issuer's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence with the issuer. Second opinions are restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO Green is not responsible for an institution's implementation of a framework, nor does it guarantee or certify the climate effects of investments in eligible projects.

Expressing concerns with 'Shades of Green'

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 of the green funding. 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:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of issuer's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the green funding framework. CICERO Green considers four factors in its review of an issuer's governance processes: 1) the policies and goals of relevance to the green funding 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.



2 Brief description of Ferde's Green Bond Framework and related policies

Ferde AS ("Ferde") is a Norwegian regional toll collection company established in 2016. Ferde is equally owned by the counties of Sogn og Fjordane, Hordaland, Rogaland, Vest-Agder and Aust-Agder (all located in West and South-West Norway). It manages toll collection following government consent and agreements with the Norwegian Public Roads Administration. The purpose of the regional toll collection companies is to use toll funds to finance infrastructure projects in their respective regions. The majority of these projects create or improve road access between towns and municipalities.

The purpose of this green bond framework is to provide Ferde with the option of issuing green bonds to finance public infrastructure projects with environmental benefits. It is the stated objective of the government's policy to increase the accessibility and efficiency of low-carbon transport alternatives and to reduce dependency on personal car transports. The proceeds from the bonds will complement Ferde's toll collection revenues and other financial instruments. In 2018, Ferde's operational revenues were NOK 2.4 billion (operational costs amounted to only 11% of revenues).

Environmental Strategies and Policies:

As a financing company with a mandate dictated by the Norwegian government's transport policy, Ferde does not have much in the way of independent environmental policies or targets. It does not produce a sustainability report, but states in its Annual Report that environmental impacts of its own operations are 'minimal'.

Ferde's mandate, as well as green bond framework, should be viewed against the backdrop of the strategic plans for the transport sector in Norway. In 2012, the Norwegian government initiated a zero-growth target for personal car transport in all larger cities, which was included in the National Transport Plan 2014-2023 and 2018-2029. This means that growth in the demand for personal transport is to be met by public transport solutions as well as improved accessibility for bicycles and pedestrians, rather than by an increasing number of personal cars. In the National Transport Plan 2018-2029, the Norwegian government has set aside NOK 66.4 billion for City Environment Plans and City Growth Plans which together with toll funds will finance public transport, bicycle and pedestrian pathways as well as train station developments.

With only 68 employees and three offices, the company's own (operational) environmental footprint is limited. Ferde is certified by the Eco-Lighthouse standard (*Miljøfyrtårnet*) established in Norway in 2003. The Eco-Lighthouse certification scheme covers environmental and quality standards similar to international labelling schemes such as EMAS and ISO 140001 on issues related to the work environment, procurement, energy, transport, waste management and GHG emissions. Ferde's environmental footprint will increase over the course of 2019 as it takes over the running of approximately 107 toll collection points which until now have been run by the Norwegian Public Roads Administration. The company does not currently have any environmental targets.

Use of proceeds:

Net proceeds from Ferde's green bonds will be used to finance a portfolio of assets and projects with environmental benefits that promote the transition towards low-carbon and climate-resilient growth. The projects relate to low-carbon transport in the five counties of Sogn og Fjordane, Hordaland, Rogaland, Vest-Agder and Aust-Agder. The



aim is to increase the capacity and energy efficiency of public transport and to improve the accessibility for bicycles and pedestrians, thereby reducing road traffic growth and carbon emissions related to transport.

Only assets and projects that comply with the list of Eligible Assets and Projects are deemed eligible for Green Bond funding. Funds can be used for the financing of new assets and projects, as well as for refinancing.

Green bonds proceeds will not be used to finance investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defense, potentially environmentally negative resource extraction, gambling or tobacco.

Selection:

Ferde has set up an internal Green Bond Committee (GBC), consisting of three representatives from Ferde's Management Team, including the CFO. The Green Bond Committee will be responsible for evaluating the infrastructure projects initiated by the counties and municipalities within Ferde's toll collection area and selecting those that are eligible for green bond funding in accordance with the Eligibility Criteria.

Decisions on eligibility must be arrived at by consensus. If there are disagreements or uncertainties, the GBC will consult external experts (in the first instance the bank advising on the green bond framework). The Green Bond Committee will be in charge of potential oversight of the Eligibility Criteria dependent on future market developments, and when deemed necessary make appropriate updates to the Green Bond Framework. The decisions made by the Green Bond Committee will be documented and filed. If an asset or project financed by green bonds no longer qualifies as eligible according to the Eligibility Criteria, the asset or project will be replaced by other assets or projects that meet the criteria. The GBC will meet at least on an annual basis.

Management of proceeds:

For regulatory reasons, each infrastructure project will have a separate account. Each Green Bond issued will be related to a specific set of infrastructure projects and thereby credited to the relevant project accounts. Within each project account, Ferde will keep records of the share of green versus regular funds.

The Finance Department of Ferde will ensure that the amount of eligible assets and projects at all times exceeds the total amount of Green Bonds outstanding.

Net proceeds from Green Bonds awaiting allocation to Eligible Assets and Projects will be managed and invested according to the overall liquidity management policy of Ferde and may be invested in short term money market instruments and cash.

Reporting:

An investor letter will be made available on the company's website, containing an allocation report and an impact report. It will be published annually for as long as there are Green Bonds outstanding.

The allocation report will list the amounts invested in each of the investment categories, the amount of new financing versus refinancing, examples of assets or projects that have been financed, the amount of Green Bonds outstanding, and the amount of net proceeds awaiting allocation to Eligible Assets and Projects.

As projects can be co-funded with the Norwegian Government and the respective counties and municipalities, Ferde will report the company's financing share of each project.



The impact report will be based on the recommendations in the Position Paper on Green Bonds Impact Reporting published by a group of Nordic public sector issuers in 2019¹. The metrics will include the following: Number of kilometers of new train lines; Number of kilometers of new low-carbon transport lanes; Number of kilometers of new pedestrian pathways; Number of kilometers of new bicycle lines and tunnels. For all of these, both finalised projects as well as those under construction will be included. Finally, where available, estimated GHG emissions reduced and/or avoided on project level and estimated reduction in car use will be included in the report.

The issuer informs that calculations on estimated GHG emission reduction and reduction in car use are made at the project level by the relevant authority (municipality or the county). As such, Ferde cannot guarantee that the data will be available. The issuer has confirmed that if estimates of GHG emission reductions are published, the methodology used to arrive at those estimates will be published as well.

¹ See <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf>



3 Assessment of Ferde’s green bond framework and policies



The framework and procedures for Ferde’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. 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 in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Ferde’s green bond framework, we rate the framework **CICERO Dark Green**.

Eligible projects under the Ferde green bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green fundings aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bond Principles (GBP) require that projects should have a clear environmental benefits, and that project selection should be well defined.

Category	Eligible project types	Green Shading and some concerns
Clean Transportation 	<ul style="list-style-type: none"> Rail transport: Trams and light rail transit lines, including the construction of new lines as well as capacity upgrades of existing lines and stations 	Dark Green ✓ To the extent possible, negative impacts on the social and environmental surroundings should be taken into consideration and minimized during the construction phase of any transport related project
Clean Transportation 	<ul style="list-style-type: none"> Road infrastructure for low-carbon transport: New as well as improvement works to existing road lanes dedicated to low-carbon transport. These include lanes dedicated to public transport, electric/hydrogen vehicles and 	Medium Green ✓ The issuer notes that the definition of these lanes (Norwegian: <i>kollektivfelt</i> and <i>sambruksfelt</i>) is set by the Norwegian Public Roads



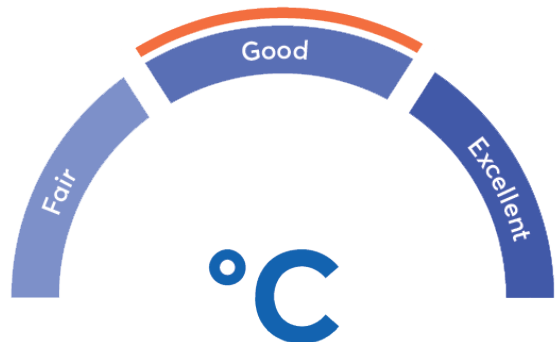
	personal cars with more than two passengers (In Norwegian: <i>kollektivfelt</i> and/or <i>sambruksfelt</i>)	Administration and may change over time
		✓ Investors should be aware that road infrastructure for cars running on fossil fuels, although with restrictions, is eligible for green bond financing
Clean Transportation	• Pedestrian pathways	Dark Green
Clean Transportation	• Bicycle lanes and tunnels	Dark Green
		✓ The Issuer has confirmed that the tunnels will be for bicycle lanes only (and not for roads more generally)

Table 1. Eligible project categories

Governance Assessment

Four aspects are studied when assessing Ferde’s governance procedures: 1) the policies and goals of relevance to the Green funding Framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

The issuer does not currently have sustainability targets nor does it publish a sustainability report. Instead it relies on certification through Miljøfyrtårnet – a Norwegian scheme similar to ISO/EMAS. As a financing company with limited operations, this is understandable, but it is an area where the company could in the future consider becoming more proactive, especially as it will be acquiring a number of toll collection points and hence will be expanding its environmental footprint. The overall assessment of Ferde’s governance structure and processes gives it a rating of **Good**.





Strengths

Ferde's green bond framework is detailed and provides transparency on the mandate, project selection and reporting aspects of the company's planned bond issuances. We are encouraged by the issuer's intention to apply a principle of consensus-based selection.

The company's green bond issuances will provide an innovative way for investors to contribute to climate-friendly infrastructure projects in several regions in Norway. The transport sector is a key contributor to climate change and continued national and regional efforts to decarbonise the sector will be crucial going forward.

Weaknesses

We find no overall weaknesses in Ferde's Green Bond Framework

Pitfalls

The issuer's mandate is driven by political decisions on infrastructure expansion in Norway. Whilst the green bond framework, with its eligibility criteria and green bond committee, provides a certain level of control over how proceeds are distributed there remains some areas which are beyond the control of the issuer and hence could pose a risk to the integrity of the green bond framework. These risks include those related to certain definitions of eligibility (e.g. what constitutes 'low carbon transport lanes' (*kollektivfelt or sambruksfelt* in Norwegian)), as well as how projects are implemented (project responsibility lies with the relevant municipality or county and not with Ferde).

As a financing entity, Ferde has limited potential to influence the design and running of projects. The impacts of the projects it is financing can arguably only be as good as the policies of its implementing partners, including policies towards subcontractors in the construction phase. A particular concern in this respect is the extent to which resiliency thinking is taken into consideration when constructing or improving infrastructure in weather and climate-exposed surroundings. However, Ferde is owned by the same counties who are in charge of executing projects, and a certain level of dialogue takes place between Ferde and its owners. We encourage Ferde to take advantage of this dialogue to influence its implementing partners in a positive 'green' direction – whenever that is possible.

Investors should be aware that the quality of Ferde's green bond reporting will depend on the collaboration of municipalities and other implementing agencies supplying the data. Moreover, the reporting of GHG emission reductions may vary from one implementer to another depending on the methodology used. Finally, many projects will be co-investments and investors should therefore take care when interpreting impact indicators as only a share of these will be attributable to the green bond (Ferde will provide information on the share of financing it is providing).

Ferde will, over the course of 2019, take over the running of more than 100 toll collection points. Whilst these are automated and hence run relatively efficiently, there will be some environmental impacts that should be managed and minimized. We encourage Ferde to map these impacts – including construction and maintenance footprints, and resilience to climate-induced accidents - and to implement measures to minimize them.

Investors should be aware that toll collection has become a contentious issue in Norwegian society in the past couple of years. The debate has centered around the level of the tolls as well as distributional aspects (in some



regions households and businesses may end up being charged many times in the course of a day for what is considered basic transportation needs).



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Ferde- Green Bond Framework October 2019	Green Bond Framework
2	Ferde Årsrapport 2018	Annual Report
3	Presentasjon DNB Green Bonds	Presentation on background for decision to create a green bond framework
4	Relevanta Lankar	Document with list of links to relevant background documents, including details on transport sector projects of relevance to Ferde
5	2018 Code of Conduct Ferde	Ferde's Code of Conduct
6	Klima og miljørapport Ferde 2018	Report by Miljøfyrtårnet of Ferde's environmental performance in 2018
7	Miljøkartlegging 2019 Ferde AS Miljøfyrtårn	Details of Certification basis for Miljøfyrtårnet
8	Sertifikat Miljøfyrtårn 2019-22	Miljøfyrtårn Certificate for 2019-22



Appendix 2: About CICERO Shades of Green

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 funding 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 and the International Institute for Sustainable Development (IISD).

