

Vardar Green Bonds

DNV GL Second Party Opinion

Scope and objectives

Vardar AS (Vardar) is a utility company investing in renewable energy production (hydropower, wind power and bio energy) in Norway, Sweden and the Baltics.

Vardar is intending to issue senior unsecured green bonds of up to 500 MNOK.

Vardar pursues wind projects in Norway and Sweden through its wholly owned subsidiaries Vardar Boreas AS and in the Baltics through its majority owned company Eurus AS. (Total annual production approximately 750 GWh, Vardar's "share" is approximately 340 GWh). Vardar's hydropower assets consist of the wholly owned subsidiary Vardar Vannkraft (which owns 28.6% of the production of the Usta and Nes power stations – 600 GWh being Vardar's share of the production) and the 50% ownership in Energiselskapet Buskerud (Energiselskapet Buskerud (EB) has a total annual hydropower production of 2500 GWh). The wholly owned company Vardar Varme AS holds a concession for district heating in the Hønefoss area, and produces approximately 43 GWh district heating, mainly based on local timber (bio energy).

Vardar has commissioned DNV GL to provide an opinion on the Vardar Green Bonds. DNV GL's role has been two-fold:

- Firstly, we have developed a Green Bond Framework (framework) based on the specific nature of corporate bonds by an issuer in a "green" business line. As the bonds are not formally linked to specific assets or projects, they do not fall directly under the definitions of the Green Bond Principles¹. We have still chosen to use the Green Bond Principle as a basis for our framework.
- Secondly, we have used this framework to review the process and disclosure made in connection with the current bonds issue and given an opinion as to whether the bonds meet the criteria established in the framework.

No assurance is provided regarding the financial performance of the bonds or the value of any investments in the bonds. Our objective has been to provide assurance that the bonds have met the criteria established on the basis set out below.

Responsibilities of the Directors of Vardar and the assurance providers

The Directors of Vardar have sole responsibility for ensuring that the conditions established by the criteria are met. Our statement represents an independent opinion and is intended to inform Vardar management and investors in the 'Vardar Green Bond' as to whether the criteria have been met. In our work we have relied on the information and the facts and realities presented to us by Vardar. DNV GL is not responsible for any aspect of Vardar's operations referred to in this opinion and cannot be held liable if estimates, findings, opinions or conclusions are incorrect.

Basis of DNV GL opinion

A framework has been developed to establish a set of suitable criteria that can be used to underpin DNV GL's opinion. The overarching principle behind the criteria is that green bonds should "enable capital-raising and investment for new and existing projects with environmental benefits"². The criteria against which the Vardar Green Bonds have been reviewed are grouped under the four headings below, as per the four Green Bond Principles.

¹ The [Green Bond Principles](#) are a set of voluntary process guidelines for issuing green bonds, initially developed by 13 leading international banks and issued in January 2014, and now supported by some 25 banks

² Source: Green Bond Principles Executive Summary

- **Principle One, Use of Proceeds**

The Use of Proceeds criteria are guided by the requirement that an issuer of green bonds must use the funds raised to finance eligible activities. The eligible activities should produce clear environmental benefits.

- **Principle Two, Process for Project Evaluation and Selection**

The Project Evaluation and Selection criteria are guided by the requirements that an issuer of green bonds should outline the process it follows when determining eligibility of an investment using Green Bond proceeds, and outline any impact objectives it will consider.

- **Principle Three, Management of Proceeds**

The Management of Proceeds criteria are guided by the requirements that green bonds should be tracked within the issuing organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.

- **Principle Four, Reporting**

The Reporting criteria are guided by the recommendation that at least annual reporting to the bond issuers should be made of the use of bond proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

The work undertaken to form our opinion included:

- The development of suitable criteria and requirements corresponding to each of the four Green Bond Principles, in a “Vardar Green Bond Principles Framework”
- A review of documentary evidence provided by Vardar and interviews with Vardar employees regarding adherence to the Green Bond Principles
- Assessment and findings identified in a protocol, made available to Vardar. The conclusion taken from this protocol is repeated below.

Findings and DNV GL opinion

Vardar is intending to issue senior unsecured green bonds for general corporate purposes of up to 500 MNOK. DNV GL has assessed the bonds and its findings are listed below, as per the four Green Bond Principles.

1. Principle One, Use of Proceeds

Vardar is a company whose mission is to “increase the availability of renewable energy”. Their current business is development and ownership of assets in the wind, bioenergy (based on local timber) and hydro power sectors. Some of Vardar’s associated hydro power plants have large storage reservoirs. Research suggests that GHG emission levels from storage reservoirs in cold and temperate climates (like Norway) are generally low. The proceeds from the bonds will mainly be used to finance Vardar’s ongoing and planned wind power activities.

It is worth noting that through EB, Vardar has indirect ownership in the electricity grid in Norway. In addition, Vardar owns and operates a small property portfolio. None of these activities can necessarily be considered “green”, although the electric power transported through the Norwegian grid is approximately 88% renewable energy-based³.

When the operations of EB are included in Vardar’s accounts, 73% of revenue (89% of Vardar’s total assets) comes from the company’s renewable power generation business (the remaining being mainly grid infrastructure and some property, as described above). This leaves the share of operations considered “purely green” below the threshold of the 90% we would normally require in order to be considered a “pure play” green company⁴. However, in this case the proceeds from the bond issue will exclusively be channelled towards Vardar’s wind and bio-energy operations. The term sheet confirms that the proceeds will not be channelled to the operations of EB or to its infrastructure (grid) activities.

³ <http://ssb.no/energi-og-industri/statistikker/elektrisitetar/aar/2014-03-28?fane=tabell#content>

⁴ Barclays MSCI green bond indices define issuers deriving at least 90% of revenues from eligible environmental activities to be “pure play”.

Based on the above, it is DNV GL's conclusion that Vardar's business activities can be considered "green" for the purpose of these bonds.

2. Principle Two, Process for Project Evaluation and Selection

Being intended for general corporate purposes and not linked to projects, this principle was instead assessed at a corporate level. From the evidence reviewed by DNV GL, nothing has come to our attention that would suggest that Vardar, or companies in which Vardar has invested, is not in compliance with relevant national environmental and social legislation when developing or operating projects or businesses.

Furthermore, DNV GL has reviewed Vardar's ESG performance in terms of measures taken by the company that go beyond legislative compliance. Based on the documentation reviewed, such as Vardar's strategy plan, corporate governance policy and status analysis of ISO 50001 it is the opinion of DNV GL that Vardar operates in an environment which promotes good ESG behaviour.

3. Principle Three, Management of Proceeds

The proceeds from the Vardar Green Bonds will be deposited in Vardar's general cash pool. The proceeds will mainly be applied towards Vardar's wind development investments, and to some degree their bio energy activities. However, Vardar will not link the proceeds to any specific assets and will not otherwise trace the disbursement of proceeds.

4. Principle Four, Reporting.

There will be no specific reporting on the impacts of the bond proceeds, as the bonds are not formally linked to assets. Vardar does, however, publicly report the CO₂ reductions resulting from its operations at the corporate level. DNV GL has reviewed Vardar's method for calculating CO₂ reductions. It is our opinion that the reported number for CO₂ reductions from its wind activities is too low. Vardar has confirmed that they will review their methodology for calculating CO₂ reductions as of their 2014 reporting, and ensure a more unified, documented and transparent methodology for calculating CO₂ reductions.

In conclusion, on the basis of the information provided by Vardar and the work undertaken, it is DNV GL's opinion that the Vardar Green Bonds meet the criteria set out in the Vardar Green Bond Framework and can be considered "green", as defined by this framework and in line with the spirit of the Green Bond Principles.

DNV GL

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Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. This means continuously developing new approaches to health, safety, quality and environmental management, so businesses can run smoothly in a world full of surprises.

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