oekom research
AKTIENGESELLSCHAFT

Second Party Opinion

Verification of the Sustainability Quality of Green Bonds issued by TenneT

24 May 2016

Aim and Scope of this Second Party Opinion

TenneT commissioned oekom research to assist with the issuance of its Green Bonds to be issued in 2016 by verifying and confirming the sustainable added value of the underlying assets using the criteria and indicators defined in TenneT's existing Green Bond Framework. The proceeds of the Green Bond issuances are used exclusively to finance a portfolio of projects with an environmental added value relating to the transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology.

The 2016 Green Bond issuances will be used to finance further expenses of projects that have already been part of a portfolio consisting of eligible projects and partly financed by TenneT through its inaugural public Green Bond issuance of 2015 and its Green Schuldschein issuance of 2016: **DolWin1, DolWin2, DolWin3**. Additionally, **BorWin3** is added to the green project portfolio as one further project from the same project category.

oekom research's mandate included the following services:

- Verification of compliance of the projects included in the green project portfolio and financed through the proceeds of the bonds using the existing verification framework criteria. The framework contains clear descriptions of eligible project categories and social and environmental criteria assigned to each category for evaluating the sustainability-related performance of the projects included in the green project portfolio.
- Verification of the alignment of the projects included in the green project portfolio with the Green Bond Principles.
- Review and classification of TenneT's sustainability performance on the basis of the oekom Corporate Rating.

Overall Evaluation of the Green Bond

oekom's overall evaluation of the Green Bond issued by TenneT is positive:

- The Green Bond's formal concept, defined processes and (announced) disclosures are aligned with the Green Bond Principles (Part I of this Second Party Opinion).
- The overall sustainability quality of the bond and the sustainability performance of each of the funded assets included in the green project portfolio in terms of sustainability benefits and risk avoidance and minimisation is good (Part II of this Second Party Opinion).
- The issuer itself shows a good sustainability performance (Part III of this Second Party Opinion).

Part I – Green Bond Principles

1) Use of Proceeds

The proceeds of the Green Bonds are and will be used exclusively to finance projects relating to the transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology. The projects financed through the bonds include several different components, such as:

- offshore converter platforms, converting wind power
- offshore cables located in the German North Sea
- onshore cables, and
- two onshore converter station locations in Northern Germany

The project category for verifying the sustainability quality of the proceeds is defined as follows:

"Transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology"

This project category is positive from a sustainability perspective because it is a prerequisite for increasing the share of wind energy in the overall European energy mix. In addition, all projects meet specific and demanding sustainability standards (see part II of this document). These criteria are clearly defined and verifiable using quantitative indicators.

The criteria ensure a substantial positive impact of the projects that is not impaired by adverse impacts and effects in other areas. Possible social risks stem from working conditions at construction sites and in the supply chain as well as impacts on local communities. Environmental risks stem from possible impacts on biodiversity and the environment in general as well as environmental standards in the supply chain.

Currently the following four projects are included in the green project portfolio and financed through the Green Bonds:

	DolWin1	DolWin2	DolWin3	BorWin3
General description	High voltage direct current transmission cable connecting offshore wind power clusters in the German Bight with the German electricity grid. Alternating current from wind power plants is transformed into direct current on the offshore converter platform. Direct current is transformed back into alternating current to be fed into the grid at the onshore converter station/ feed-in point.			
Offshore converter platform	DolWin alpha	DolWin beta	DolWin gamma	BorWin gamma
Onshore converter station/ Feed-in point	Dörpen West (Germany)	Dörpen West (Germany)	Dörpen West (Germany)	Emden/Ost (Germany)
Transmission power	800 MW	916 MW	900 MW	900 MW
Cable length	165 km (75km submarine, 90 km onshore)	135 km (45 km submarine, 90 km onshore)	162 km (83 km submarine, 79 km onshore)	160 km (130 km submarine, 30 km onshore)
Start of construction	2010	2012	2014	2015
Start of operation	2015	2016	2017	2019

For all four transmission systems, TenneT has/had to lay high voltage underground cables through environmentally sensitive areas in order to connect offshore wind power plants to the onshore electricity grid. Environmentally sensitive areas affected by these projects include the German Wadden Sea National Park and protected natural habitats of wild fauna and flora, such as Unterems and Außenems.

2) Process for Project Evaluation and Selection

The selection of the projects that are included in the green project portfolio is carried out by TenneT internally. The applied eligibility criterion determines that selected projects should allow for the connection of renewable energy plants to the overall electricity grid. TenneT's sustainability and treasury departments made a positive judgement on the four projects based on financial and non-financial criteria.

In addition, oekom research has defined a framework of criteria allowing for a detailed evaluation of the selected projects. This verification framework is presented in Part II and Annex I of this document.

3) Management of Proceeds

Pending allocation of the net proceeds of the Green Bonds to the eligible projects, TenneT has committed to moving proceeds to a sub portfolio with the special purpose of financing, refinancing and/or investing in eligible projects. The net proceeds will be held, at TenneT's discretion, in cash or other liquid marketable

instruments. The balance of the portfolio will be reduced by the amounts invested in the eligible projects until the amount is fully used. TenneT commits to establish a system to monitor and account for the net proceeds for investment in eligible projects.

TenneT states that the total current budget for the four projects included in the green project portfolio amounts to approx. EUR 5.2 billion. About 13% of the current total budget have already been raised via other sources such as third party minority participations and bank funding. The net proceeds of the Green Bonds to be issued in 2016 will make an additional contribution to the overall financing of the aforementioned four projects included in the green project portfolio.

4) Reporting

TenneT commits to a regular reporting towards the Green Bond's investors. This reporting will comprise the following information:

- The allocation of proceeds to the projects included in the project portfolio
- The advancement of the projects in the building phase
- Environmental and social impact indicators

In particular, TenneT plans to report on the following key performance indicators:

- Project-related safety performance (accident rate, fatal accidents)
- SF_6 emissions related to the projects
- Average interruption time related to the projects
- Transmission losses due to transport of wind energy generated offshore to the converter stations onshore
- Significant controversies (major leaks, heavy accidents, etc.)

In addition, the impact indicators as defined in the Green Bond Verification Framework will be updated on a yearly basis.

This reporting will be carried out once a year until the maturity date of the allocated bonds. It will be reviewed by a second party consultant or by an independent auditor with limited assurance. The reporting will be provided by TenneT on its website (www.tennet.eu), with the first Green Bond Report already being available.[1]

[1] Green Funding for Sustainable Growth – Green bond report 2015: http://www.tennet.eu/nl/investors/financial-publications.html

Part II – Sustainability Quality of the Green Bond

1) Green Bond Verification Framework

The Green Bond Verification Framework helps to illustrate the sustainability quality and thus the social and environmental added value of TenneT's Green Bond issuances. The verification framework clearly defines the eligible categories and encloses specific sustainability criteria in order to verify the sustainability performance of the Green Bond. Using quantitative indicators allows to measure the sustainability performance of the bonds, to set ambitious targets and to report on progress. In addition, impact indicators provide investors with concrete information on environmental added value.

Details on the individual criteria and indicators for the project category can be found in Annex 1 „Green Bond Verification Framework".

2) Verification of the Projects Refinanced by the Green Bond

Methods

oekom research has verified whether the projects to be funded through the bonds match the project categories and criteria listed in the Green Bond Verification Framework.

The verification was carried out using information and documents provided to oekom research, partly on a confidential basis, by TenneT (e.g. environmental impact assessments, health and safety standards for contractors and subcontractors, official planning approvals, petitions of affected parties).

Findings

A. Transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology

- A.1. Consideration of environmental aspects in planning and installation of offshore converter platforms
  - ✓ For all four offshore converter platforms, DolWin alpha, beta and gamma as well as BorWin gamma (the offshore converter platforms of DolWin1, DolWin2, DolWin3 and BorWin3 respectively), TenneT performed comprehensive environmental impact assessments and conducted research with respect to possibly affected animals such as marine mammals, birds, fish and bats.
  - ✓ For all four offshore converter platforms, TenneT and its contractors (will) use low-noise construction methods or noise-reducing technology to avoid negative impacts on marine mammals living in the vicinity of the platforms. Aversive conditioning measures and "soft-start"-procedures are implemented to keep away and thus protect porpoises during installation work.
  - ✓ TenneT requires its contractors to prove that their ships have "fit-for-purpose" certifications as well as systems in place that guarantee "zero effluents" during maintenance operations.
- A.2. Consideration of environmental aspects in operation of offshore and onshore converter stations
  - ✓ Hazardous waste from all of the offshore converter platforms is or will be appropriately treated in Germany.

- For DolWin beta, TenneT uses ultra-stable Epoxy paint as antirust protection of the converter platforms' steel jackets. However, no information is available on environmentally friendly antirust protection of the other three converter platforms' steel jackets.
- ✓ For all converter stations (onshore and offshore), TenneT's SF_6 policy applies. It covers clear responsibilities for SF_6 management, the ambition to reduce the SF_6 leakage rate by 20% by 2020 compared to the 2015 level, and the commitment to biannual pilot projects that can help to reduce SF_6 in insulation systems.
- ✓ For all (onshore and offshore) converter stations in Germany and The Netherlands, TenneT's SF_6 policy also specifies the aim to achieve an SF_6 leakage rate below 0.15% by 2020. In addition, DolWin alpha, beta and gamma as well as BorWin gamma are expected to fulfil the manufacturers' specifications (leakage rate ‹0.1%) in the first years of operation (beginning in 2015, 2016, 2017 and 2019 respectively).

- A.3. Consideration of environmental aspects in cable-laying (onshore and offshore)
  - ✓ For all cable-laying projects, TenneT has – in consultation with experts – considered alternative routes during planning and discussed the final route planning in detail in order to minimise the environmental impact of construction work.
  - ✓ For all cable-laying projects, TenneT has performed comprehensive environmental impact assessments and conducted research with respect to affected flora, fauna, water and soil. Some resting birds might be affected by construction work in the short term, but – according to research done by environmental experts – a sufficient number of alternative resting areas is available nearby.
  - ✓ 100% of the projects' connections are sub-soil (offshore) and underground (onshore) cables.
  - ✓ For 100% of the cables laid, TenneT takes appropriate measures to avoid/reduce soil warming. Cables are laid 1.5m beneath the surface in the Wadden Sea area and 2.5m below the ground in dune areas.
  - ✓ According to the biodiversity assessments for 100% of the projects, none of them affects endangered species. Relocations are therefore not necessary.
  - ✓ All Flora-Fauna-Habitat-areas onshore (DolWin1, DolWin2 and DolWin3) are tunnelled completely. In addition, construction areas of former cable-laying projects have been used or widened to reduce the environmental impact of cable-laying.
  - ✓ For all projects, breading periods of birds have been taken into account in the planning for cable-laying work. Therefore, clearances have only been carried out between 1st of October and 28th of February.
  - ✓ For 100% of cable-kilometres in the Wadden Sea National Park, construction work is conducted between 15th of July and the 30th of September to avoid disturbance of birds during their breading periods.
- A.4. Standards for decommissioning and rehabilitation of cable-laying construction sites
  - ✓ For all of the construction sites, TenneT ensures the rehabilitation of the landscape and the removal of construction equipment after cable-laying.
  - ✓ For DolWin1 and DolWin2, TenneT is required to make compensation payments for rehabilitation measures in affected and/or circumjacent conservation areas (in consultation with the state authorities). So far no such information is available with respect to DolWin3 and BorWin3. However, TenneT indicates that similar measures will be taken there.
- A.5. Standards for decommissioning and recycling of offshore converter platforms at end-of-life
  - ✓ For all projects and in accordance with German law, TenneT is required to remove offshore converter platforms and ensure safe disposal of maritime installations on land after decommissioning.

- ✓ For DolWin alpha and beta, TenneT has provided financial securities to ensure removal costs are covered after decommissioning. As this is not required for DolWin gamma and BorWin gamma, no securities are provided.
- ✓ For all projects offshore converter platforms are to be disassembled in qualified locations at their end-of-life and materials to be recycled.

- A.6. Community dialogue
  - ✓ Regarding all projects, TenneT takes comprehensive measures to inform affected communities at an early stage and has feedback mechanisms for public consultation in place.
  - ✓ For all projects, TenneT compensates landowners whose property is crossed by the cable routes.
- A.7. Working conditions during construction and maintenance work
  - ✓ For all projects, TenneT requires high safety standards from its contractors and subcontractors working on onshore and offshore construction sites. Comprehensive health and safety management systems have to be implemented, comprising e.g. clear responsibilities, emergency plans, data compilation and appropriate training. Audits are conducted to check such systems and their implementation.
  - ✓ For all of the cable-laying projects and the onshore converter stations in Dörpen and Emden, TenneT requires its contractors and subcontractors to adhere to the German law on working time (*Arbeitszeitgesetz*). Further, freedom of association and minimum wages are guaranteed in Germany.
  - ✓ For all four projects, TenneT requires high safety standards from its contractors during maintenance work. Comprehensive health and safety management systems have to be implemented, comprising e.g. clear responsibilities, emergency plans, data compilation and appropriate trainings. Audits are conducted to check such systems and their implementation.
  - ✓ No fatal accidents occurred in the context of DolWin1, DolWin2, DolWin3 and BorWin3 so far.
  - ✓ Accident rates are available for the past three years for DolWin1, DolWin2, DolWin3 and BorWin3 (if relevant, depending on start of construction). Even though the overall accident rate increased, it is comparatively low in regard to an industry wide benchmark (LTIFR: 2013: 1.0, 2014: 6.0 and 2015: 2.8 LWC/million hours worked)[2].
- A.8. Social standards in the supply chain
  - ✓ For all four projects, good and binding health and safety standards are applied within the supply chain.
  - O For all four projects, TenneT's supplier standards also cover labour rights and working conditions (e.g. forced labour, freedom of association, wages) to some extent. However, these are not detailed and not binding.
  - ✓ For all four projects, good and binding environmental standards are applied within the supply chain (e.g. wastewater treatment and hazardous substances management).
  - O TenneT conducts off-site audits and excludes suppliers in case of non-compliance with the standard. However, no information is available on further compliance measures for supplier standards (e.g. procedures other than exclusion of suppliers in case of non-compliance, facilitation of non-compliance reporting, on-site audits).

[2] LWC: lost workday; LTIFR: lost time injury frequency rate (LWC/million hours worked)

Impact Indicator 1: Number of households provided with access to wind power

All four transmission lines together would allow about 4.3 million households in Germany (about 10.6% of all German households) to switch to 100% renewable energy. This calculation is based on the average electricity consumption of one German household in 2014 and the assumption that a) full capacity of the new transmission lines is used, b) connected wind power plants reach 4,000 full load hours per year and c) around 6.4% of electricity produced is lost during transmission and distribution

Impact Indicator 2: Potential avoidance of CO2 emissions

If the full capacity of the four transmission lines is used, wind parks connected to the electricity grid through the transmission lines would provide about 13.2 TWh of renewable energy per year and annually avoid about 10.6 million tons of CO2 emissions. This calculation is based on the *average carbon intensity of fossil fuel-based electricity generation in Germany in 2015* (ENTSO-E-Mix) and the assumption that a) full capacity of the new transmission lines is used, b) connected wind power plants reach 4,000 full load hours per year and c) around 6.4% of electricity produced is lost during transmission and distribution.

Part III – Assessment of TenneT's Sustainability Performance

In the oekom Corporate Rating with a rating scale from A+ (excellent) to D- (poor), TenneT was awarded a score of B- and classified as "Prime". This means that the company performed well in terms of sustainability, both compared against others in the industry and in terms of the industry-specific requirements defined by oekom research. In oekom research's view, the securities issued by the company thus all meet the basic requirements for sustainable investments.

Corporate Responsibility Prime
rated by oekom research

As at 24.05.2016, this rating puts TenneT Holding B.V. in place 19 out of 175 companies rated by oekom research in the utilities sector.

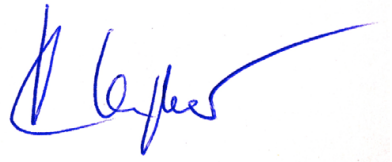
In this sector, oekom research has identified the following issues as key challenges facing companies in term of sustainability management:

- Climate protection, renewables and resource efficiency
- Safe operation of plants and infrastructure
- Reliable energy and water supply for the entire population
- Business ethics
- Worker safety and accident prevention

In four out of these five key issues, TenneT Holding B.V. achieved a rating that was above the average for the utilities sector.

As at 24.05.2016, external research did not reveal any controversies related to TenneT's business practices.

Details on the rating of the issuer can be found in Annex 2 "oekom Corporate Rating TenneT Holding B.V.".



oekom research AG

Munich, 24 May 2016

Disclaimer

1. oekom research AG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition we create a Second Party Opinion (SPO) on bonds based on data from the issuer.

2. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of oekom research AG in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the selection criteria is based solely on random samples and documents submitted by the issuer.

3. All statements of opinion and value judgements given by us do not in any way constitute purchase or investment recommendations. In particular, the SPO is no assessment of the economic profitability and credit worthiness of a bond, but refers exclusively to the social and environmental criteria mentioned above.

4. We would point out that this SPO, in particular the images, text and graphics contained therein, and the layout and company logo of oekom research AG are protected under copyright and trademark law. Any use thereof shall require the express prior written consent of oekom research AG. Use shall be deemed to refer in particular to the copying or duplication of the SPO wholly or in part, the distribution of the SPO, either free of charge or against payment, or the exploitation of this SPO in any other conceivable manner.

About oekom research

oekom research is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries with regard to their environmental and social performance. oekom research has extensive experience as a partner to institutional investors and financial service providers, identifying issuers of securities and bonds which are distinguished by their responsible management of social and environmental issues. More than 100 asset managers and asset owners routinely draw on the rating agency's research in their investment decisionmaking. oekom research's analyses therefore currently influence the management of assets valued at over 600 billion euros.

As part of our Green Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria. We verify the compliance with the criteria in the selection of projects and draw up an independent second party opinion so that investors are as well informed as possible about the quality of the loan from a sustainability point of view.

Contact: oekom research AG, Goethestraße 28, 80336 Munich, Germany, tel: +49 / (0) 89 / 54 41 84-90, e-mail: info@oekom-research.com

Annexes

- Annex 1: oekom Green Bond Verification Framework
- Annex 2: oekom Corporate Rating TenneT Holding B.V.

Annex 1: Green Bond Verification Framework

Green Bond Verification Framework

The Green Bond Verification Framework helps to illustrate the sustainability quality and thus the social and environmental added value of TenneT's Green Bond issuances. The verification framework clearly defines the eligible categories and encloses specific sustainability criteria in order to verify the sustainability performance of the Green Bonds. With the use of quantitative indicators the sustainability performance of the bonds can be measured, ambitious targets set and progress reported. In addition, impact indicators provide investors with concrete information on environmental added value.

Use of Proceeds

The proceeds of the Green Bonds issued by TenneT will be exclusively used for the following project category:

A. **Transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology**

Sustainability Criteria and Quantitative Indicators for Use of Proceeds

In order to ensure that the environmental and social risks linked to the financed projects are prevented and the opportunities clearly fostered, a set of sustainability criteria has been established for each project category. Possible quantitative indicators, allowing for measurement of progress and regular reporting, complete each criterion.

Project category A: Transmission of renewable electricity from offshore wind power plants into the onshore electricity grid using direct current technology or alternating current technology

A.1. Consideration of environmental aspects in planning and installation of offshore converter platforms

Quantitative indicators:

- Percentage of offshore converter platforms that fulfil high environmental standards and requirements (environmental impact assessment, biodiversity assessment, research on impacts on maritime fauna).
- Percentage of offshore converter platforms that fulfil high environmental standards during off-shore construction works (noise mitigation, avoidance of pile driving, minimisation of discharges to ocean).

A.2. Consideration of environmental aspects in operation of offshore and onshore converter stations

Quantitative indicators:

- Percentage of offshore converter platforms that fulfil high environmental standards and requirements during operations (noise mitigation, safe waste storage and disposal, environmentally friendly antirust protection).
- Percentage of converter stations for which high standards regarding SF_6-leakage prevention are applied (alternatives to SF_6 insulation, replacement of equipment with persistent leaks, maintenance of infrastructure).

A.3. Consideration of environmental aspects in cable-laying (onshore and offshore)

Quantitative indicators:

- Percentage of offshore cables in biodiversity hotspots for which alternative route planning has been considered and/or route planning has been optimised in consultation with experts.
- Percentage of onshore and offshore cables that fulfil high environmental standards and requirements (environmental impact assessment, biodiversity assessment, research on impacts on flora and fauna, relocation of endangered species if applicable, research and mitigation with regard to soil warming).
- Percentage of onshore cables for which low-impact methods are applied during cable-laying (horizontal drilling, consideration of breading periods of affected animals).

A.4. Standards for decommissioning and rehabilitation of cable-laying construction sites

Quantitative indicator:

- Percentage of projects for which decent decommissioning and rehabilitation of construction sites is conducted.

A.5. Standards for decommissioning and recycling of offshore converter platforms at end-of-life

Quantitative indicator:

- Percentage of projects for which environmental and social impacts at end-of-life (after at least 20 years of operation) will be minimised (recycling and reuse of parts, sound treatment of waste, financial provisions, high safety standards for workers).

A.6. Community dialogue

Quantitative indicator:

- Percentage of projects where community dialogue is conducted as an integrated part of the planning process and during operation (sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

A.7. Working conditions during construction and maintenance work

Quantitative indicators:

- Percentage of projects where the company itself as well as its contractors apply high labour and safety standards during construction work (for all projects).
- Percentage of projects where the company itself as well as its contractors apply high labour and safety standards during maintenance work (only for offshore converter platforms).
- Occurrence of fatal accidents and annual accident rate related to construction and maintenance work (own employees and contractors) at project sites.

A.8. Social standards in the supply chain

Quantitative indicators:

- Percentage of projects where suppliers have to fulfil high standards regarding working conditions.
- Percentage of projects where suppliers have to fulfil high standards regarding environmental issues.

Controversies

- Description of possible controversies (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Impact Indicator 1: Number of households provided with access to wind power

- For the initial verification of a project:
  Total number of households per transmission line that would be able to switch to 100% renewable energy through the new transmission line (based on the average electricity consumption of one German household and if full capacity of new transmission lines was used).
- For annual reporting per project:

  1. Total number of households per transmission line that would be able to switch to 100% renewable energy through the new transmission line (based on the average electricity consumption of one German/Dutch household in the relevant year and if full capacity of new transmission lines was used).
  2. Total number of households that would be able to switch to 100% renewable energy through the new transmission line (based on the average electricity consumption of one German/Dutch household, and the amount of wind power installed and transmitted through the line in the relevant year).

Impact Indicator 2: Potential avoidance of CO_2 emissions

- For the initial verification of a project:
  Potential avoidance of CO_2-emissions per year as soon as the project is in operation and if 100% of cable capacity is used (compared to the carbon intensity of fossil fuel-based electricity generation in Germany).
- For annual reporting per project:

  1. Potential avoidance of CO_2-emissions per year as soon as the project is in operation and if 100% of cable capacity is used (compared to the carbon intensity of fossil fuel-based electricity generation in Germany/the Netherlands in the relevant year).
  2. CO_2 emissions avoided through the transmission of 100% wind power from offshore plants to the electricity grid (compared to the carbon intensity of fossil fuel-based electricity generation in Germany/the Netherlands, and based on the amount of wind power transmitted through the respective line in the relevant year).

oekom Corporate Rating

TenneT Holding BV

Industry:	Utilities
Country:	Netherlands
ISIN:	XS0513509959
Bloomberg Ticker:	1590Z NA Equity

Status **Prime**

Rating **B-**

Prime Threshold **B-**

Corporate Responsibility Prime rated by oekom research

D-	D	D+	C-	C	C+	B-	B	B+	A-	A	A+

poor | medium | good | excellent

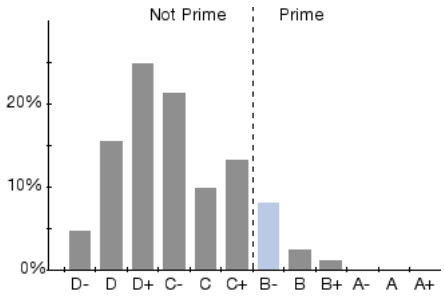
Competitive Position

Industry Leaders
(in alphabetical order)

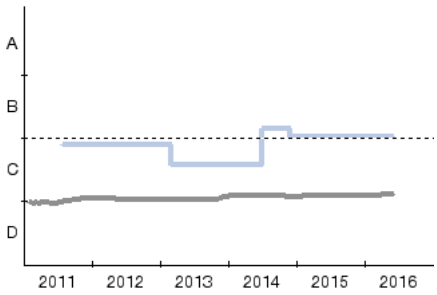
- REN - Redes Energeticas Nacionais SGPS SA (PT) B+
- Terna Rete Elettrica Nazionale SpA (IT) B+
- Verbund AG (AT) B

Company Industry

Distribution of Ratings
(175 companies in the industry)

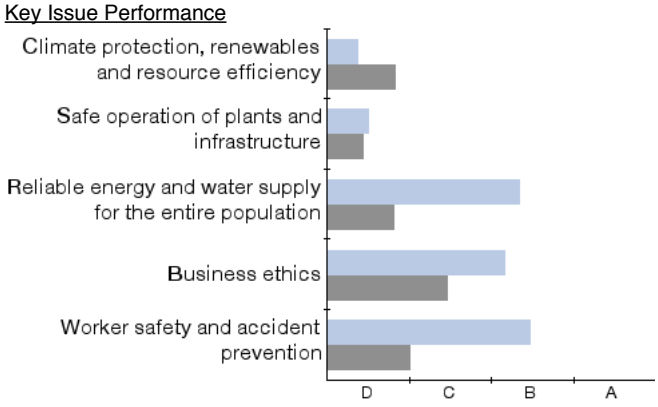


Rating History



Key Issues

Key Issue Performance



Strengths and Weaknesses

+ low average interruption time of the network
+ comprehensive initiatives to enhance community awareness and outreach
+ adequate measures to minimise environmental impacts of electricity transmission systems
+ various activities to integrate renewable energy sources in the electricity grid

- increasing greenhouse gas emissions intensity in recent years
- lack of transparency on participation in public policy making and lobbying activities

Controversy Monitor

Company

Controversy Score	0
Controversy Level	Minor

Minor	Moderate	Significant	Severe

Industry

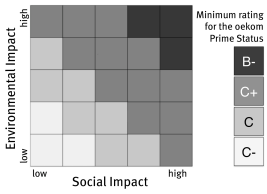
Maximum Controversy Score	-44
Controversy Risk	Severe

Minor	Moderate	Significant	Severe

Contact details: oekom research AG, Munich / Germany. Phone: +49 89 544184 90. Email: info@oekom-research.com

TenneT Holding BV

Methodology - Overview

oekom Corporate Rating	The oekom Universe comprises more than 3,500 companies (mostly companies in important national and international indices, but also small & mid caps drawn from sectors with links to sustainability as well as significant non-listed bond issuers). The assessment of the social and environmental performance of a company is generally carried out with the aid of approx. 100 social and environmental criteria, selected specifically for each industry. All criteria are individually weighted, evaluated and aggregated to yield an overall score (Rating). In case there is no relevant or up-to-date company information available on a certain criterion, it is graded with a D-. In order to generate a comprehensive picture of each company, our analysts collect information relevant to the rating both from the company itself and from independent sources. During the rating process, considerable importance is attached to cooperating extensively with the company under evaluation. Companies are regularly given the opportunity to comment on the results and provide additional information. An external rating committee assists the analysts at oekom research with the content-related design of industry-specific criteria and carries out a final plausibility check of the rating results at the end of the rating process.
Controversy Monitor	The oekom Controversy Monitor is a tool for assessing and managing reputational and financial risks associated with companies' negative environmental and social impacts. The controversy score is a measure of the number and extent of the controversies in which a company is currently involved: all controversial business areas and business practices are assigned a negative score, which varies depending on the significance and severity of the controversy. Both the score of the portrayed company and the maximum score obtained in the industry are displayed. For better classification, the scores are assigned to different levels: minor, moderate, significant and severe. The industry level relates to the average controversy score. Only controversies, for which reliable information from trustworthy sources is available, are recorded. It should be noted that large international companies are more often the focus of public and media attention and available information is often more comprehensive than for less prominent companies.
Distribution of Ratings	Overview of the distribution of all company ratings of an industry from the oekom Universe (company portrayed in this report: light blue). The industry-specific Prime threshold (vertical dotted line) is also shown.
Industry Classification	The social and environmental impacts of industries differ. Therefore, subject to its relevance, each industry analysed is classified in a Sustainability Matrix. Depending on this classification, the two dimensions of the oekom Corporate Rating, i.e. the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the oekom Prime Status (Prime threshold) are defined (absolute best-in-class approach). 
Industry Leaders	List (in alphabetical order) of the top three companies in an industry from the oekom Universe at the time of generation of this report.
Key Issue Performance	Overview of the company's performance with regard to important social and environmental issues that are key to the industry, compared to the industry average.
Rating History	Trend in the company's rating over time and comparison to the average rating in the industry.
Rating Scale	Companies are rated on a twelve-point scale from A+ to D-: A+: the company shows excellent performance. D-: the company shows poor performance. Overview of the range of scores achieved in the industry (light blue) and display of the industry-specific Prime threshold (vertical dotted line).
Sources of Information	Data for the Bloomberg Ticker, Company Name, Country and ISIN was sourced from Bloomberg.
Status & Prime Threshold	Companies are categorised as Prime if they achieve/exceed the minimum sustainability performance requirements (Prime threshold) defined by oekom for a specific industry (absolute best-in-class approach) in the oekom Corporate Rating. Prime companies rank among the leaders in that industry.
Strengths & Weaknesses	Overview of selected strengths and weaknesses of a company with regard to relevant social and environmental criteria.

Please note that all data in this report relates to the point in time at which the report was generated.

