

04 September 2024 – Neuss, Germany

Rating Action / Update:

Creditreform Rating has affirmed the unsolicited corporate issuer rating of TenneT Holding B.V., at **A / negative**

Creditreform Rating (CRA) has affirmed the unsolicited, public corporate issuer rating of TenneT Holding B.V., as well as the unsolicited corporate issue rating of the long-term local currency senior unsecured notes issued by TenneT Holding B.V., at **A**. The outlook has been revised from stable to **negative**. The initial solicited short term rating has been set to **L2** (high level of liquidity). For more information with regard to TenneT's structural, business, and financial risks, please refer to the full rating report of 17 November 2021, and the subsequent rating updates, all of which are published on our website.

Current relevant factors for the rating

The following considerations were of specific relevance for the rating assessment:

- + Shareholder contribution of EUR 1.6 billion during 2023 allocated to equity was a stabilizing factor for credit metrics
- + Provision of a EUR 25 billion shareholder loan, covering investment needs until the end of the business year 2025
- + Positive operating results in 2023 following stabilization of energy prices
- Free Cash Flow further under pressure due to a further ramp-up in investments
- Termination of discussions with the German government with respect to the full sale of TenneT Germany; TenneT is now exploring alternative funding solutions for TenneT Germany

ESG-criteria:

CRA generally takes ESG factors (environment, social and governance) into account within its rating decisions. In the case of TenneT Holding B.V. we have not identified any ESG factors with significant influence.

As a transmission system operator active within the Netherlands and Germany, TenneT plays a central role in the energy transition in Europe. The Group is exposed to changing legislation and policies with regard to national and European climate targets. The "European Green Deal" aims for a 55% reduction in carbon emissions within the European Union by 2030., with the objectives set out in the Green Deal being translated into national policy. The Group expects its investments to increase structurally over the next 10 years, and will make large contributions to Dutch and German CO₂ reduction targets. TenneT aids in the energy transition by connecting renewable energy production to the grid. As of the end of 2023, the Group had installed 12.2 GW of transmission capacity to transmit renewable energy from offshore power sources to the on-shore grid. The target is to install 40 GW of transmission capacity in total by 2030 in the Netherlands and Germany.

To align its financial policy with its sustainability strategy, TenneT has developed a Green Financing framework. The Green Financing instruments under this program are linked to renewable energy projects defined in the EU taxonomy. In this way, the Company hopes to contribute to

Analysts

Rudger van Mook
Lead Analyst
R.vanMook@creditreform-rating.de

Elena Damijan
Co-Analyst
E.Damijan@creditreform-rating.de

Neuss, Germany

ESG factors are factors related to environment, social issues, and governance. For more information, please see the section "Regulatory requirements". CRA generally takes ESG relevant factors into account when assessing the rating object, and discloses them when they have a significant influence on the creditworthiness of the rating object, leading to a change in the rating result or the outlook.

Please note:

The scenarios are based on information available at the time of the rating. Within the forecast horizon, circumstances may occur that could lead to a change of the rating out of the indicated range.

sustainable solutions for the Netherlands and Germany. At the end of the 2023 business year, TenneT had outstanding green bonds of EUR 19.4 billion.

A general valid description of Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found [here](#).

Rating result

The current unsolicited corporate issuer rating of **A** attests TenneT Holding B.V. a high level of creditworthiness, representing a low default risk.

TenneT has a low business risk profile due to the nature of its business, which is backed by the Dutch and German regulatory frameworks. This is further enhanced by its (natural) monopoly position in its grid area as the only TSO in the Netherlands and one of four in Germany. The regulatory frameworks lead to relatively predictable revenues and cash flows, as well as stable financial performance altogether. Additionally, TenneT's high degree of systemic importance, as well as its close relationship with its shareholder, the Dutch government, has a positive influence on the rating.

Offsetting factors are the increasing investment needs, which have significantly risen to approximately EUR 160 million over the next ten years, and which far exceed the Group's cash flow generation capacity. In order to retain its financial strength, the Group needs to raise significant equity capital. Historically, TenneT has partially financed the investments in the Dutch grid alone with shareholder capital. After the termination of discussions with the Kreditanstalt für Wiederaufbau ("KfW") with respect to the full sale of TenneT Germany, the equity needs for the German grid still remain open. However, in order to prevent any financing or liquidity issues, and to prevent delays in the scheduled investments in the electricity transmission grid, the Dutch government provided TenneT with a EUR 25 billion shareholder loan which covers the financing needs for both the 2024 and 2025 business years. TenneT is currently exploring alternative funding solutions for its German operations. Although the immediate financing needs are covered by the shareholder loan, the lack of a long-term equity solution could result in a decline in TenneT's credit quality if these needs go unaddressed.

Outlook

The one-year outlook for the rating has been revised to **negative**. Although we still expect TenneT to secure a structural equity solution for TenneT Germany, we foresee, all else being equal, a decline in credit metrics over the next two business years. This is primarily driven by the termination of discussions regarding a full sale of TenneT Germany to KfW, leaving the equity needs for the German grid unresolved. At the same time, the Dutch government has provided a shareholder loan covering the Group's financing needs through the end of the 2025 business year. Since the loan ranks *pari passu* with all other senior debt, we have not classified it as equity. Consequently, we expect a notable weakening in credit metrics, particularly those related to leverage

Best-case scenario: A

In our best-case scenario for one year, we assume a rating of A. This is based on our expectation that the Group's (underlying) key financial ratios relating to profitability will not change over the coming 12 months as its operations are almost fully regulated by stable regulatory frameworks in both the Netherlands and Germany. With the provision of its shareholder loan, TenneT has its investment needs for the 2024 and 2025 business year covered. An upgrade at this time is

unlikely as the equity needs for the German grid remain open, and a durable solution with respect to TenneT Germany should be found.

Worst-case scenario: A-

In our worst-case scenario for one year, we assume a rating of A-. This assessment is based on a scenario in which TenneT at the end of 2025 has not been able to find a structural solution for TenneT Germany and the Dutch government is not willing to provide further support, forcing TenneT to increase borrowings, which may further weaken credit metrics. If the Group will not be able to find structural solutions in 2026 either, a further deterioration of the unsolicited corporate issuer rating cannot be ruled out.

Business development and outlook

Table 1: Financials of TenneT Holding B.V. | Source: TenneT Holding B.V. Annual report 2023, standardized by CRA

TenneT Holding B.V. Selected key figures of the financial statement analysis Basis: Annual accounts and report of 31.12. (IAS, Group)	CRA standardized figures ¹	
	2022	2023
Sales (million EUR)	8,299	9,298
EBITDA (million EUR)	137	2,624
EBIT (million EUR)	-1,096	1,274
EAT (million EUR)	-879	711
EAT after transfer (million EUR)	-967	595
Total assets (million EUR)	37,764	40,868
Equity ratio (%)	18.48	21.51
Capital lock-up period (days)	233.19	186.03
Short-term capital lock-up (%)	44.01	54.95
Net total debt / EBITDA adj. (factor)	176.91	11.82
Ratio of interest expenses to total debt (%)	0.97	1.54
Return on Investment (%)	-1.65	2.85

As part of the energy transition, TenneT is accelerating its investment in the electricity grid, with record investments reaching EUR 7,730 million in 2023 (2022: EUR 4,493 million). This surge in spending has resulted again in a significantly negative cash flow after investments (excluding EEG financing) of EUR -4,424 million (2022: EUR -4,941 million). Investment levels are expected to increase further, with at least EUR 10 billion projected for 2024 and total investments anticipated to rise to approximately EUR 160 billion over the next decade (up from the previously expected EUR 111 billion). Without government support or durable equity solutions, TenneT's current financial trajectory is unsustainable and could lead to a rapid deterioration of its credit metrics.

¹ For analytical purposes, CRA adjusted the original values in the financial statements in the context of its financial ratio analysis. For example, when calculating the analytical equity ratio, deferred tax assets, goodwill (entirely or partly), and internally-generated intangible assets are subtracted from the original equity, whilst deferred tax liabilities are added. Net total debt takes all balance sheet liabilities into account. Therefore, the key financial figures shown often deviate from the original values of the company.

TenneT's shareholder, the Dutch government, has historically provided equity capital for investments in the Dutch grid. It has not done the same for the German grid. Both the Dutch and German governments have indicated their preference to control, own, and fund their national electricity infrastructures independently. However, negotiations for the full sale of TenneT Germany to the German government, represented by Kreditanstalt für Wiederaufbau (KfW), were terminated on June 20, 2024 due to budgetary constraints, thus preventing the transaction from proceeding. As a result, TenneT is exploring alternative structural financing solutions while remaining fully committed to its investment plans in both countries. Nevertheless, the specific nature of these solutions for the German grid remains unclear. To prevent financing and liquidity issues, the Dutch government has provided a EUR 25 billion shareholder loan, which will cover TenneT's financing needs, including the projected investments for both the Dutch and German grids. These needs amount to approximately EUR 13 billion for 2024 and EUR 12 billion for 2025. The loan is to be repaid between 2030 and 2040.

TenneT's credit metrics remained stable in 2023, despite the increasing pace of investments and resulting negative cash flow. Outstanding debt rose to EUR 22,511 million (up from EUR 19,175 million in 2022), but the equity ratio improved to 21.51% (up from 18.48% in 2022) due to a shareholder contribution of EUR 1,602 million. Initially recorded as a liability, this contribution has now been reallocated to equity, as the sale of TenneT Germany to the KfW is unlikely to go ahead at present.

During the 2023 business year, the Group's revenues increased to EUR 9,298 million (2022: EUR 8,299 million), an EBITDA of EUR 2,624 million (2022: EUR 137 million), EBIT of EUR 1,274 million (2022: EUR -1,096 million) and a net result of EUR 711 million (2022: EUR -879 million). The revenue increase was mainly due to higher reimbursements for ancillary services, increased regulatory tariffs, a growing regulatory asset base, and a favorable court ruling in the Netherlands on the 7th method decision for the 2022-2026 Dutch regulatory period. This ruling resulted in the ACM's benchmark scores for measuring efficiency being lifted to 100%, and revisions made to the determination of WACC, and therefore had a positive effect on revenues. The increase in operating profit was driven by higher revenues and lower ancillary service costs, which had surged in 2022 due to volatility in the energy markets. The underlying figures for 2023, which reflect future regulatory assets and liabilities, have shown positive development. The underlying operating profit rose to EUR 1,709 million (from EUR 1,162 million in 2022), mainly due to higher reimbursements for regulatory assets, driven by increased interest rates, a larger RAB, and better results from non-regulated activities.

In the first half of 2024, underlying revenues fell to EUR 4,050 million (H1 2023: EUR 4,794 million), mainly due to a decline in ancillary services driven by lower energy prices and reduced regulatory rates for ROE in Germany, partially offset by an increasing RAB. However, underlying EBIT increased to EUR 1,002 million (2022: EUR 930 million) due to the growing RAB and lower depreciation, despite the lower regulatory rates for ROE in Germany. Free cash flow remained significantly negative as investments rose to EUR 4,591 million (H1 2023: 3,475 million).

For the next two years, we expect a deterioration in credit metrics following the expected increase in debt, including the EUR 25 billion shareholder loan, ranking pari passu with all other senior debt. However, we see it positively, that with the provision of the loan the financing needs for both 2024 and 2025 are fully covered. As of H1 2024, TenneT had drawn EUR 7 billion from the loan.

Notwithstanding this, the equity requirements for the German grid remain unresolved. Despite extensive discussions, the German government has decided not to proceed with the full purchase of TenneT Germany, citing budgetary constraints as the reason. TenneT is presently looking into alternative funding solutions for its German operations. While its immediate financing needs are secured by the shareholder loan, the absence of a long-term equity solution could lead to a rapid deterioration in TenneT's credit quality if these needs go unmet.

Further ratings

Based on the long-term issuer rating, and taking into account our liquidity analysis, the initial short-term rating of TenneT Holding B.V. has been set at **L2** (standard mapping), which corresponds to a high level of liquidity based on the assessment for one year.

The rating objects of this issue rating are exclusively the long-term senior unsecured Notes, denominated in euro, issued by TenneT Holding B.V., and which are included in the list of ECB-eligible marketable assets. The ECB list of eligible marketable assets can be found on the website of the ECB.

The notes have been issued under the EMTN program with its latest prospectus of 28 April 2022 and a 1st supplement dated 6 October 2022. This EMTN program amounts to EUR 25 billion. According to the terms and conditions of the prospectus, the issuer is able to issue both senior notes and subordinated notes. Here we will solely focus on the senior Notes of TenneT Holding B.V.; should this change in the future, we will explicitly make mention of this. The senior Notes and coupons under the EMTN program constitute direct, unconditional, unsecured, unsubordinated obligations of the Issuer, and rank at least *pari passu* among themselves and with all other present and future unsecured obligations of the issuer. Additionally, the notes benefit from a negative pledge provision, a change of control clause, and a cross default mechanism.

We have provided the debt securities issued by TenneT Holding B.V. with a rating of **A / negative**. The rating is based on the corporate rating of TenneT Holding B.V. Other types of debt instruments, or notes of the issuer denominated in other currencies, have not been rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG.

The following tables provide an overview of the ratings issued by Creditreform Rating AG in this context, as well as the key features of the Euro Medium Term Note Program.

Overview

Table 2: Overview of CRA Ratings | Source: CRA

Rating Category	Details	
	Date	Rating
TenneT Holding B.V.	04.09.23024	A / negative / L2
Long-term Local Currency (LC) Senior Unsecured Issues	04.09.23024	A / negative
Other	--	n.r.

All future LT LC senior unsecured Notes issued by TenneT Holding B.V., and those that have similar conditions to the current EMTN program, denominated in euro and included in the list of ECB-eligible marketable assets will, until further notice, receive the same ratings as the current LT LC senior unsecured Notes issued under the DIP program. Notes issued under the program in any currency other than euro, or other types of debt instruments, have not yet been

rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG. For the time being, other emission classes or programs (such as the Commercial Paper Program), as well as issues that do not denominate in euro, will not be assessed

Appendix

Rating history

The rating history is available under the following [link](#).

Table 3: Corporate issuer rating of TenneT Holding B.V. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial Rating	17.11.2021	23.11.2021	05.07.2022	A / stable

Table 4: LT LC senior unsecured issues by TenneT Holding B.V. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	17.11.2021	23.11.2021	05.07.2022	A / stable

Regulatory requirements

The rating² was not endorsed by Creditreform Rating AG (Article 4 (3) of the CRA-Regulation).

The present rating is, in the regulatory sense, an unsolicited rating that is public. The analysis was carried out on a voluntary basis by Creditreform Rating AG, which was not commissioned by the Issuer or any other third party to prepare the present rating.

The rating is based on the analysis of published information and on internal evaluation methods for the assessment of companies and issues. The rating object was informed of the intention of creating or updating an unsolicited rating before the rating was determined.

² In these regulatory requirements the term "rating" is used in relation to all ratings issued by Creditreform Rating AG in connection to this report. This may concern several companies and their various issues.

The rating object participated in the creation of the rating as follows:

With Rated Entity or Related Third Party Participation	No
With access to Internal Documents	No
With Access to Management	No

A management meeting did not take place within the framework of the rating process.

The documents and information gathered were sufficient to meet the requirements of Creditreform Rating AG's rating methodologies.

The rating was conducted based on the following rating methodologies and the basic document.

Rating methodology	Version number	Date
Corporate Ratings	2.4	July 2022
Corporate Short-Term Ratings	1.0	June 2023
Government-related Companies	1.1	May 2023
Non-financial Corporate Issue Ratings	2.0	March 2024
Rating Criteria and Definitions	1.3	January 2018

The documents contain a description of the rating categories and a definition of default.

The rating was carried out by the following analysts:

Name	Function	Mail-Address
Rudger van Mook	Lead-analyst	R.vanMook@creditreform-rating.de
Elena Damijan	Analyst	E.Damijan@creditreform-rating.de

The rating was approved by the following person (person approving credit ratings, PAC):

Name	Function	Mail-Address
Stephan Giebler	PAC	S.Giebler@creditreform-rating.de

On 4 September 2024, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the company on 4 September 2024. There has not been a subsequent change to the rating.

The rating will be monitored until Creditreform Rating AG withdraws the rating. The rating can be adjusted as part of the monitoring, if crucial assessment parameters change.

In 2011, Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on this registration, Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

ESG-factors

You can find out whether ESG factors were relevant to the rating in the upper section of this rating report "Relevant rating factors".

A general valid description for Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found [here](#).

Conflict of interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or in approving credit ratings and rating outlooks.

Creditreform Rating AG ensures that the provision of ancillary services does not present conflicts of interest with its credit rating activities and discloses in the final rating reports any ancillary services provided for the rated entity or any related third party. The following ancillary services were provided for the rating entity or for third parties associated with the rated entity:

No ancillary services in the regulatory sense were carried out for this rating object.

For the complete list of provided rating and credit service ancillaries please refer to the Creditreform Rating AG's [website](#).

Rules on the presentation of credit ratings and rating outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our "Rating Committee Policy", all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, Creditreform Rating AG has used following substantially material sources:

Corporate issuer rating:

1. Annual report
2. Website
3. Internet research

Corporate issue rating:

1. Corporate issuer rating incl. information used for the corporate issuer rating
2. Documents on issues / instruments

There are no other attributes and limitations of the credit rating or rating outlook other than those displayed on the Creditreform Rating AG website. Furthermore, Creditreform Rating AG considers as satisfactory the quality and extent of information available on the rated entity. With respect to the rated entity, Creditreform Rating AG regarded available historical data as sufficient.

Between the time of disclosure of the credit rating to the rated entity and the public disclosure, no amendments were made to the credit rating.

The Basic Data Information Card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating report and indicates how the different methodologies or other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings and best-case scenario credit ratings are explained.

The date at which the credit rating was initially released for distribution and the date when it was last updated, including any rating outlooks, is indicated clearly and prominently in the Basic Data Information Card as a "rating action"; initial release is indicated as "initial rating", other updates are indicated as an "update", "upgrade" or "downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the Basic Data Information Card.

In accordance with Article 11 (2) EU-Regulation (EC) No 1060/2009, a registered or certified credit rating agency shall make available, in a central repository established by ESMA, information on its historical performance data including the rating transition frequency and information about credit ratings issued in the past and on their changes. Requested data are available at the [ESMA website](#).

An explanatory statement of the meaning of Creditreform Rating AG's default rates are available in the credit rating methodologies disclosed on the website.

Disclaimer

Any rating performed by Creditreform Rating AG is subject to the Creditreform Rating AG Code of Conduct, which has been published on the web pages of Creditreform Rating AG. In this Code of Conduct, Creditreform Rating AG commits itself – systematically and with due diligence – to establish its independent and objective opinion as to the sustainability, risks and opportunities concerning the enterprise or the issue under review.

Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. This rating is therefore no statement of fact, but an opinion. For this reason, Creditreform Rating AG cannot be held liable for the consequences of decisions made on the basis of any of their ratings. Neither should these ratings be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers, investors etc.) as one factor among others when arriving at corporate or investment decisions. Ratings are not meant to be used as substitutes for one's own research, inquiries and assessments.

We have assumed that the documents and information made available to us by the client are complete and accurate and that the copies provided to us represent the full and unchanged contents of the original documents. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

This report is protected by copyright. Any commercial use is prohibited without prior written permission from Creditreform Rating AG. Only the full report may be published in order to prevent distortion of the report's overall assessment. Excerpts may only be used with the express consent of Creditreform Rating AG. Publication of the report without the consent of Creditreform Rating AG is prohibited. Only ratings published on the Creditreform Rating AG web pages remain valid.

Creditreform Rating AG

Contact information

Creditreform Rating AG

Europadamm 2-6
D-41460 Neuss

Phone: +49 (0) 2131 / 109-626
Telefax: +49 (0) 2131 / 109-627

E-Mail: info@creditreform-rating.de
Web: www.creditreform-rating.de

CEO: **Dr. Michael Munsch**
Chairman of the Board: Michael Bruns

HR Neuss B 10522