

24 November 2022 – Neuss, Germany

Rating Action / Update:

Creditreform Rating has affirmed the unsolicited corporate issuer rating of Terna Rete Elettrica Nazionale S.p.A. at **BBB / stable**

Creditreform Rating (CRA) has affirmed the unsolicited, public corporate issuer rating of Terna Rete Elettrica Nazionale S.p.A. (hereinafter referred to as Terna or the Company), as well as its unsolicited corporate issue rating of long-term local currency senior unsecured notes, at **BBB**. Additionally, CRA has maintained the **stable** outlook for the above rating objects.

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Current relevant factors for the rating

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

- The Company has been delivering stable operating results since the outbreak of Covid-19 despite market turbulences, and more recently with overall increased price volatility
- Rising interest rates are unlikely to jeopardize Terna's financial strength, as parameters used to calculate WACC in the tariff methodology can be updated annually under more pronounced market variations
- Russia-Ukraine has not had any impact on the Italian electricity systems thus far, but any shortfall during the winter can only be partially offset by other sources, exerting negative pressure on the Company's earnings results
- Meaningful reduction in short-term financial debt and maintenance of good liquidity profile
- Accelerated energy transition with an updated investment plan of EUR 10 billion for the 2021-2025 period, compared to EUR 8.9 billion announced previously
- Commodity price volatility and uncertainty about contract deliveries increase project execution risks
- Unsolicited sovereign rating of the Italian Republic (**BBB-** / **stable** as of 11.02.2022) is a relevant factor in Terna's final rating result, given the Company's strong ties with the Government and its strategic importance for the country

ESG factors are factors related to environment, social issues and governance. For more information, please see the "Regulatory requirements" section. 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.

ESG-criteria:

CRA generally considers ESG factors (environment, social and governance) within its rating decisions. In the case of Terna Rete Elettrica Nazionale S.p.A. we have not identified any ESG factors with significant influence.

As a transmission system operator active in Italy, with 99% of the national power grid, Terna plays a central role in the energy transition in Europe. The electricity sector faces increasing pressure to expand investments in renewables, being subject to regulatory changes and increasingly rigid climate action goals. Terna will support the Italian government to achieve its Green New Deal and Italy's decarbonization strategy – the National Integrated Energy and Climate Plan (PNIEC) – which sets a target of 55% coverage of energy consumption through renewable sources by 2030 (33% in the first half of 2022), implying the need for an additional 40GW of installed renewable capacity. This target is likely to be revised in accordance with new legislation, accelerating the construction of new renewable energy sources (RES) capacity over the next decade. The Group has announced investments of EUR 18 billion within the next 10 years, aiming

to expand power transmission lines and integrate its main energy consumption locations with renewable energy generation.

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 rating result reflects Terna's stable operating performance over recent years and our expectation that credit metrics will remain at healthy levels in the coming 12-24 months. The Company proved its resilience during the COVID-19 pandemic and, more recently, with the increased volatility in the energy industry, increasing its net revenues and EBITDA generation sequentially over the last few years. In addition, Terna continues to benefit from its very low-risk business model and predictable cash flow generation, given that around 85% of total revenues come from regulated activities, and has been able to sustain a solid financial position. Lastly, we also factor the Company's leading position in Europe and its strategic importance for the Italian government into the ratings, as it owns 99% of the national power grid. Terna's ratings rank one notch above the sovereign rating of the Italian Republic (BBB- / stable as of 11 February 2022), given the Company's above-average profitability compared to peers, and overall satisfactory key financial indicators.

Outlook

The outlook for the rating is stable based on our expectation that credit metrics will remain at healthy levels over the next 12 months, supported by measures taken by the Italian government to stabilize the national electricity system, as well as by the Company's stable cash flow generation and prudent financial management. Should there be prolonged shortfalls in the supply of natural gas, with adverse impact in the company's earnings results, the outlook would have to be revised.

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.

Best-case scenario: BBB

In our best-case scenario, we assume a rating of BBB. In this scenario, Terna's operating performance remains at healthy levels over the next 12 months, backed by resilient energy demand and by the execution of its investment plans without a significant increase in debt levels. It is also expected that Terna will continue to have ample access to capital markets and maintain an adequate liquidity position, thus refinancing debt maturities ahead of time. Given the Company's strong links with the government of Italy, more stable economic performance would also have a positive impact on Terna's ratings.

Worst-case scenario: BBB-

In our worst-case scenario, we assume a rating of BBB-. In this scenario, we consider that the Company will face more severe economic recession, with energy demand receding significantly in 2023 and operating results deteriorating. We also incorporate a more pronounced increase in financial debt levels, resulting in the worsening of financial key indicators. In this case, Terna's liquidity position would be further pressured by weaker internal cash flow generation, increasing the Company's financial risk.

Business development and outlook

Terna proved its resilience during the COVID-19 pandemic, increasing its net revenues and EBITDA generation despite periods of severe lockdowns and lower energy demand in 2020. With the rollout of vaccinations and the normalization of the health crisis throughout 2021, economic activities rebounded, driving higher energy consumptions levels which in turn generated market imbalances and prompted volatility in energy prices. In 2022, economic turmoil intensified with the outbreak of Russia-Ukraine conflict, exerting additional price volatility and increasing the risk of commodity supply disruptions; nevertheless, the Company continued to post stable earnings results. This performance attests Terna's very low-risk business model and predictable cash flow generation, especially due to the fact that nearly 85% of total revenues are generated from regulated activities and that the Government will likely continue to adopt the necessary measures to stabilize the national electricity system.

So far, numerous measures have been taken by the Government to counterbalance the impact of rising electricity price, including reduction in bills for energy-intensive sectors, energy vouchers for lower-income households, removing general costs associated with the gas system and cutting taxes. However, a prolonged shortfall in the supply of natural gas would severely affect the company's results, since 37% of power generated in Italy requires this raw material as an energy source, which can only partially be replaced by other alternatives in the short-to-medium term.

Reflecting a more challenging operational environment over the last few years, Terna's net revenues increased by 10.8% over 2019-2021, reaching EUR 2,535 million in 2021, while CRA's adjusted EBITDA increased at a slower pace of 6.5% in this period, reaching EUR 1,849 million in 2021 and contracting the Company's EBITDA margin to 72.9% from 75.9% pre-pandemic levels. In the first nine months to September 2022, Terna sustained stable earnings results, with reported EBITDA generation increasing by 3.5% on a year-over-year basis, but with profitability continuing on gradual downward trend. In the regulated segment, results have been supported by the expansion of its regulated asset base (RAB) and by the introduction by ARERA of an output-based tariff adjustment that rewards the Company's cost efficiencies. The non-regulated segment posted a moderate fall of 2.7% in the first nine months of 2022, given the extraordinary effect of greater fibre contract volumes in the first half of 2021. The international segment includes operations in several countries overseas, still representing a very small share in the Group's total revenues, with results declining successively over recent years. In April 2022, Terna reached an agreement with CDPQ to sell all of its power transmission activities in Latin America (Brazil, Paraguay and Uruguay) for EUR 265 million, and since then these businesses have been accounted separately under assets held for sale.

Against the backdrop of increasing electricity demand in the long-term and growing concern about the Italian government's decarbonization strategy, Terna decided to accelerate its investment plan for the 2021-2025 period, increasing its capital expenditures to EUR 10 billion (compared to EUR 8.9 billion announced previously). The expected disbursement amount represents a meaningful increase when compared to the EUR 4.9 billion spent over the 2016-2020 period. These investments aim to integrate renewable energy sources (RES) with the main consumption centres through the construction of high-voltage transmission lines, as well as to renew and improve the efficiency of existing assets and invest in technologies that enhance both the system's functionality and digitalization. Terna's investment plan is aligned with the National Integrated Energy and Climate Plan (PNIEC), which foresees the addition of 40 GW of new wind and solar capacity, enabling renewables to meet 55% of electricity demand by 2030 (compared to 33% in the first half 2022). This target will likely be reviewed according to new legislation, which stipulates 60-70 GW of new RES capacity by 2030 and meeting up to 65% of total consumption.

A significant share of planned capex will be directed to the regulated segment, with RAB increasing to EUR 22.7 billion by the end of the program (compared to around EUR 16 billion in 2020). In the first half 2022, investments in the regulated segment increased by 10% compared to the previous year, representing 95% of the Company's capex. In the non-regulated business, there will be limited investments and low-risk exposure with a cumulative EBITDA generation of EUR 450 million over the 2021-2025 period. In the international segment, Terna will pursue the strategy of expanding its presence in low-risk markets, such as the United States, and divesting its assets in Latin America.

Terna will have high investment needs over the next decade in order to support Italy's energy transition towards renewable sources, and this comes with an accelerated increase in interest rates, which could exert pressure on the Company's financial strength. Nevertheless, we believe that Terna will continue to benefit from predictable and growing cash flow generation, sustaining its solid financial position and stable credit metrics. In the first nine months of 2022, Terna's financial gross debt decreased by EUR 1.8 billion compared to 2021 year-end levels, following the repayment of EUR 1,453 million in short-term credit facilities and EUR 1,000 million in bond debt throughout 2022, partially offset by a EUR 630 million increase in other borrowings.

Terna's liquidity position improved significantly during 2022, with short-term debt falling by half at the end of September compared to the end of 2021, and the cash balance covering 3.6 times the upcoming debt maturities (2.5 times at the end of last year). In the first nine months of 2022, the Company resumed its positive free cash flow generation after a cumulative cash burn of EUR 521 million during 2020-2021, and we believe it will continue to have ample access to debt markets for the timely refinancing of its financial obligations.

Table 1: Financials of Terna Rete Elettrica Nazionale S.p.A | Source: Annual report 2021, standardized by CRA

Terna Rete Elettrica S.p.A. Selected key figures of the financial statement analysis Basis: Annual accounts and report of 31.12. (IAS, Group)	CRA standardized figures ¹	
	2020	2021
Sales (million EUR)	2,377.50	2,534.50
EBITDA (million EUR)	1,809.90	1,848.50
EBIT (million EUR)	1,184.20	1,192.50
EAT (million EUR)	795.30	790.80
EAT after transfer (million EUR)	785.50	789.40
Total assets (million EUR)	20,505.30	22,097.70
Equity ratio (%)	21.31	20.48
Capital lock-up period (days)	340.41	471.73
Short-term capital lock-up (%)	115.82	168.90
Net total debt / EBITDA adj. (factor)	7.16	8.26
Ratio of interest expenses to total debt (%)	0.54	0.55
Return on Investment (%)	4.26	3.95

Table 2: Recent development of Terna Rete Elettrica S.p.A. | Source: Q3 2022 Interim results, as reported

Terna Rete Elettrica S.p.A.				
In million EUR	9M 2021	9M 2022	Δ	Δ %
Sales	1,889.9	1,992.4	+102.5	+5.42
EBIT	874.0	896.3	+22.3	+2.55
EBITDA	1,365.0	1,412.2	+47.2	+3.46
EBT	816.5	840.0	+23.5	+2.88
EAT	587.9	603.2	+15.3	+2.60

Issue rating

Issue rating details

The rating objects of this issue rating are exclusively the long-term senior unsecured issues, denominated in euro, issued by Terna Rete Elettrica Nazionale S.p.A. 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 within the framework of the Euro Medium Term Note (EMTN) programme, of which the latest base prospectus dates from 8 June 2022. This EMTN programme amounts to EUR 9 billion. The notes are senior unsecured, and rank at least pari passu among

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.

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 ownership clause and a cross default mechanism.

We have provided the debt securities issued by Terna Rete Elettrica Nazionale S.p.A. with an unsolicited rating of **BBB / stable**. The rating is based on the corporate rating of Terna Rete Elettrica Nazionale S.p.A. Other types of debt instruments or issues denominated in other currencies of the issuer 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.

Overview

Table 3: Overview of CRA Ratings | Source: CRA

Rating Category	Details	
	Date	Rating
Terna Rete Elettrica Nazionale S.p.A. (Issuer)	24.11.2022	BBB / stable
Long-term Local Currency (LC) Senior Unsecured Issues	24.11.2022	BBB / stable
Other	--	n.r.

Table 4: Overview of 2022 Euro Medium Note Programme | Source: Base Prospectus dated 8.6.2022

Overview of 2022 EMTN Programme			
Volume	EUR 9,000,000,000	Maturity	Depending on respective bond
Issuer / Guarantor	Terna Rete Elettrica Nazionale S.p.A.	Coupon	Depending on respective bond
Arranger	IMI – Intesa Sanpaolo UniCredit	Currency	Depending on respective bond
Credit enhancement	None	ISIN	Depending on respective bond

All future LT LC senior unsecured Notes that will be issued by Terna Rete Elettrica Nazionale S.p.A. and that have similar conditions to the current EMTN programme, denominated in euros 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 EMTN programme. 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 Programme) and issues not denominated in euros will not be assessed.

Appendix

Rating history

The rating history is available under:

<https://www.creditreform-rating.de/en/ratings/published-ratings.html>

Table 5: Corporate issuer rating of Company Terna Rete Elettrica Nazionale S.p.A. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial Rating	14.12.2018	21.12.2018	15.12.2020	BBB / stable

Table 6: LT LC senior unsecured notes issued by Terna Rete Elettrica Nazionale S.p.A. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	14.12.2018	21.12.2018	15.12.2020	BBB / 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.

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

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 was conducted based on the following information.

List of documents
Accounting and controlling
<ul style="list-style-type: none"> Annual Report 2021 Half-year Report 2022 Interim financial report 9M 2022
Finance
<ul style="list-style-type: none"> EMTN Base Prospectus dated 8 June 2022
Additional documents
<ul style="list-style-type: none"> Industrial Plan 2021-2025 Company's presentation Press releases

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

The documents submitted 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
Government-related Companies	1.0	April 2017
Non-financial Corporate Issue Ratings	1.0	October 2016
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
Holger Becker	Lead-analyst	H.Becker@creditreform-rating.de
Sabrina Mascher de Lima	Analyst	S.Mascher@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 24 November 2022, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the company on 25 November 2022. 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.

In the event of providing ancillary services to the rated entity, Creditreform Rating AG will disclose all ancillary services in the credit rating report at this point:

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

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.

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