Creditreform Corporate Issuer / Issue Rating
Eni S.p.A.

Creditreform Rating

03 November 2021 – Neuss, Germany

Rating Action / Update:

Creditreform Rating has set the unsolicited corporate issuer rating of Eni S.p.A. to BBB+ / Stable

Creditreform Rating (CRA) has confirmed the unsolicited, public corporate issuer ratings of Eni S.p.A. and Eni Finance International SA – together referred as Company, the Company or the Group, as well as the unsolicited corporate issue rating of the long-term local currency senior unsecured notes issued by Company at **BBB+**. The outlook has been changed to **stable**.

Analysts

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Current relevant factors for the rating

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

- Negative changes in the financial ratios after the crisis year 2020 due to decrease in sales and margins as well as substantial impairments
- Prompt management reaction to the crisis implications and development of measures to protect liquidity, including limitation of capex, cost savings and introduction of variable dividend payments
- Stabilization of the economic situation after the COVID-19 crisis in 2021, and favorable price environment
- Recovery in earnings, and stabilization of financial metrics in 2021, with expected further improvements due to positive global framework conditions and prudent strategy
- Issue of hybrid bonds, and positive cash flow after investments enabled stabilization of financial debt in 2021
- Proved access to financial markets
- Developed strategy of business model transformation in line with current global decarbonization efforts
- CO_2 footprint reduction measures would implicate significant investments
- Concentration on the Italian market
- Above-average country risks in upstream business

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

ESG-criteria:

CRA generally considers ESG factors (environment, social and governance) within its rating decisions. In the case of Eni S.p.A. we have identified ESG factors with significant influence on the following categories, which is described in the sections below.

(E) Environment ☒ (S) Social ☐ (G) Governance ☐

- (E): Current focus on fossil energy sources and production materials
- (E): Risks of impairments on oil and gas assets in the short to mid-term as a result of changes in the market and regulatory environment
- (E): Mid- to long-term risks for the oil and gas industry business model and the financing e.g. regarding to EU-Taxonomy

Due to societal and political changes with regard to fossil fuels based on European and international environmental and climate protection targets, we see Eni's business model and strategy impaired in the medium to long term. Global efforts towards decarbonization lead us to expect significant shifts in the demand for fossil fuels in the medium term, which have a direct material influence on the Company's activities in the form of restrictions, costs for CO_2 certificates and environmental protection measures, recultivation expenses, as well as on its investment behavior in the form of redesigning the product portfolio and investments in technologies aiming to limit CO_2 emissions. Due to global CO_2 budgets, the risk of stranded assets cannot be ruled out in the future. Current trends in automobile registrations imply likely shifts and a general decline in demand for refined products. In addition, these tendencies have an ever greater influence on the behavior of potential investors, and could make access to capital market resources more difficult in the future.

Nevertheless, we assume that oil and gas will continue to play an important role in the energy business and industrial production in the long term, albeit with gradually decreasing relevance. We see natural gas in particular as an essential part of the energy mix in the long term and as a transition technology.

In line with an overall social and political climate protective efforts, Eni's strategy is aimed at the fundamental target of complete climate neutrality (Scope 1, 2 and 3) by 2050. To achieve this target, Eni has worked out a range of concrete measures, which include, inter alia:

- reduction of hydrocarbon production with growth of the share of gas to 60% by 2030 and 90% by 2050;
- conversion of traditional refining through use of recycled waste materials and bio-products;
- enhancement of efficiency and digitization;
- expansion of renewable capacity from 0.7 GW in 2021 to 15 GW in 2030 and 60 GW in 2050 and increase in the number of retail customers to 20 million by 2050;
- use of new technologies for CO_2 capture and storage, and production of electricity and hydrogen from gas;
- development of charging infrastructure for electric mobility;
- forest conservation projects to offset the unavoidable CO_2 emissions.

These measures require significant investments, with a corresponding impact on the Company's financial metrics. For the period 2021-2024, Eni plans overall spending of 5.7 billion EUR for decarbonization projects, which in future it is to make up 20% of the total capex.

Due to the specific goals and active measures to improve sustainability, we currently see the effects of ESG factors as limited. However, our overall assessment of the assessment area had a negative impact on the rating.

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 BBB+ attests Eni S.p.A. a highly satisfactory level of creditworthiness, representing a low to medium default risk. After the outbreak of the

COVID-19 pandemic, and a significant decrease in sales and margins, the management developed a range of liquidity-protecting measures, including capex limitation, cost savings and the introduction of a variable dividend. These measures, along with the issuance of hybrid bonds, has allowed the Company to withstand the crisis and keep its indebtedness at its pre-crisis level. Against the backdrop of the global stabilization of markets and commodity prices, development in the financial year 2021 shows a significant improvement in Eni's earnings and cash flows, and consequently of its key financial figures, despite a slight decrease in exploration and production. The overall economic recovery with growing demand for energy sources and rising prices, along with the Company's strategy of restrained capex especially in upstream and controlled costs and distribution, support our rating assessment.

We have based the rating on our assessment that the Group is dependent on the Italian government as the main shareholder, and moderately dependent on the country's overall economic situation. The rating of Eni is constrained by the sovereign rating of the Italian Republic (CRA: BBB- / negative as of 05 March 2021). We attest the Group a corporate rating two notches above the sovereign rating of the Italian Republic. In our rating, the current focus on fossil fuels in connection with the associated material effects on the Company's activities is taken into account as a negative factor.

Outlook

The one-year outlook for the unsolicited corporate issuer rating of Eni S.p.A. is stable. We assume that, in accordance with progress towards a sustainable containment of the COVID-19 pandemic, and an expected overall economic recovery in 2021 and 2022, the demand for oil and gas and their products will further improve. Currently, the gas and naphtha supply does not cover increased demand resulting from improved economic situation after the pandemic, which is the primary reason for extreme price increases, especially in Europe. We assume an overall stabilization of the prices and do not expect commodity price erosions in the middle-term perspective. On the other side, the negative impact of the crisis induced by the pandemic on Eni's financials has been rather significant, so that we do not exclude a change in outlook to negative if the framework conditions worsen again.

Best-case scenario: BBB+

In our best-case scenario for one year, we assume a rating of BBB+. In this scenario, economic recovery progresses in 2021 and 2022, and the Group continues to implement its strategy and to follow efficiency optimization measures and financial discipline. Due to the deterioration of Eni's key financials in 2020 resulting from the COVID-19 crisis, we believe that an improvement of the rating during one year is unlikely. In addition, our rating is restrained by the sovereign rating of Italy, which cannot be exceeded by more than three notches and is currently at BBB- with a negative 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.

Worst-case scenario: BBB

In the worst-case scenario for one year, we assume a rating of BBB. In this scenario, we assume that the economic environment remains unstable, resulting in deterioration of the Company's earnings, or a disproportionate increase in debt compared to earnings. In addition, the deterioration of the sovereign rating of Italy could have a negative impact on the Eni's rating.

Business development and outlook

The development of the Group in 2020 was marked by a severe decline in demand for oil, induced by worldwide repeated lock-down measures during the year intended to contain the spread of COVID-19 pandemic. The situation was aggravated by disagreements among the OPEC+ members, which caused an oversupply of oil in March 2020 with an unprecedented fall in prices. As a result, the average Brent price declined by 35% compared to previous year, as did the average price for natural gas. Eni's average refining margin was down by 60% following the depressed demand environment for refinery products.

Table 1: Financials of Eni S.p.A. I Source: Eni S.p.A. Annual report 2020, standardized by CRA

Eni S.p.A. **Selected key figures of the financial statement analysis** **Basis: Annual accounts and report of 31.3. (IAS, Group)**	**CRA standardized figures[1]**	
	2019	**2020**
Sales (million EUR)	69,881.00	43,987.00
EBITDA (million EUR)	17,279.00	7,081.00
EBIT (million EUR)	8,957.00	-327.00
EAT (million EUR)	155.00	-8,628.00
EAT after transfer (million EUR)	148.00	-8,635.00
Total assets (million EUR)	118,208.00	104,119.00
Equity ratio (%)	40.40	36.16
Capital lock-up period (days)	54.73	72.02
Short-term capital lock-up (%)	26.85	33.18
Net total debt / EBITDA adj. (factor)	3.29	7.06
Ratio of interest expenses to total debt (%)	2.10	1.74
Return on Investment (%)	1.17	-7.36

Against the backdrop of low prices and low production volumes in 2020, the Company suffered a significant decline in sales (37%), and reported a net loss of 8.64 billion EUR. Following the management's revised assumptions regarding long-term gas and oil prices, Eni recognized an impairment of 3.3 billion EUR on its oil and gas assets, as well as on refineries. Along with impairments, there was a range of other expenses connected to the exceptional economic situation in 2020, which were of a non-recurring nature, inter alia 1.3 billion EUR evaluation losses, 1.66 billion losses taken from at-equity accounted investments, and a 1.3 billion write-down of deferred tax assets driven by a projection of lower taxable income. According to Eni, non-recurring items amounted 7.9 billion EUR and the adjusted net loss for 2020 was 758 million EUR. Net cash from operations declined by 7.6 billion EUR (61%) compared with 2019, to 4.8 billion EUR.

[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.

In response to the crisis implications, the Group's management introduced cost-saving measures which brought an improvement of 1.1 billion EUR. Furthermore, a package of liquidity-preserving actions was implemented, such as a capex reduction by 35% which brought savings of 2.6 billion EUR, issuance of bonds (2.0 billion EUR) in May 2020, and hybrid bonds (3.0 billion EUR) in October 2020, as well as putting the share buyback program on hold. The capital expenditure was revised and reduced to 4.6 billion EUR, 46% less than in the previous year (8.3 billion EUR), partly due to the OPEC+ extraction limitations. The distribution policy was adjusted through the introduction of a variable component in dependence on the volatility of market prices. Leveraging on these measures, the Company was able to overcome the downturn and to keep the net borrowings almost at the 2019 level (16.59 billion EUR as of 31 December 2020 vs. 17.13 billion EUR as of 31 December 2019, including lease liabilities). The Group's liquidity reserves as of 31 December 2020 amounted to 20.4 billion EUR, consisting of 9.4 billion EUR cash and cash equivalents, 5.3 billion EUR of undrawn credit lines, and 5.4 billion EUR of readily disposable securities, and were adequate considering the forthcoming financial obligations and committed investments for 2021 of 11 billion EUR as well as dividend payments (1,965 million EUR in 2020).

Development in the first nine months of 2021 was characterized by general economic recovery and favorable framework conditions, despite the ongoing effects of the COVID-19 pandemic. In the third quarter of 2021, the Brent price increased by over 70% to an average of 73.5 USD/bbl against the backdrop of the macroeconomic growth, the normalization of global stocks, the production management of the OPEC+ alliance, and a disruption of oil production in the Gulf of Mexico after hurricane Ida. The prices for gas on the spot markets in Europe and in Italy reached 500 EUR kcm, i.e. year-on-year increases of +500% and +400% respectively. The reasons for this price surge lie in the economic recovery, reduced global supply, and lower storage levels than historical averages. Mainly due to the higher feedstock and utility costs, the margins in chemical and refinery business remained low.

Table 2: Business development of Eni S.p.A. I Source: Interim Consolidated Report as of September 30, 2021, reported information

Eni S.p.A.				
In million EUR	**2020**	**2021**	**Δ**	**Δ %**
Sales	32,356	49,809	17,453	53.9
Operating profit (loss)	(3,555)	6,650	3,095	--
Adjusted operating profit (loss)	1,410	5,858	4,448	315
Net profit (loss)	(7,838)	2,306	10,144	--
Adjusted net profit (loss)	(808)	2,630	3,438	--

As of 30 September 2021, Eni generated sales of 49,809 million EUR, an increase of 54% compared with the previous year (2020: 32,356 million EUR), and reported an operating profit (EBIT) of 6,650 million EUR (2020: -3,555 million EUR) and an adjusted operating profit of 5,858 million EUR (2020: 1,410 million EUR). This strong performance was primarily driven by the Exploration & Production segment, which reported an operating profit of 6.0 billion EUR (2020: -1.2 billion EUR) and an adjusted operating profit of 5.7 billion EUR (2020: 0.7 billion EUR). This development was primarily driven by materially higher average realized prices for oil and gas (78% and 48% respectively for nine months) and lower costs, and partly offset by lower production due to maintenance activities (1.663 kboe/d vs. 1.740 kboe/d in 2020). EGL, Power and Renewables generated an adjusted EBIT of 374 million EUR (2020: 333 million EUR), which was supported by gains in the Company's extra-commodity business, as well as benefits from the integration of the distributed photovoltaic business (Evolvere), marketing initiatives in Italy, a growth in the customer base following expansion in Greece, the acquisition of Aldro Energía in Spain, and offset by the unfavorable trading environment in its generation business. The Company's activities In Refining & Marketing were marked by a negative development of refinery margins, as well as by the higher costs for CO_2 emission allowances, which resulted in an adjusted operating profit of -10 million EUR, 374 million EUR lower than in nine months of 2020. In the Chemicals division, the EBIT amounted to 266 million EUR (2020: -184 million EUR) due to the recovery in demand and better plant utilization. Global Gas & LNG was affected by negative spreads between European and Italian spot markets (TTF/PSV spread at first time in history negative in third quarter 2021), and was significant compared to 2020 (40 million EUR vs. 400 million EUR), also due to one-off positive effects due to renegotiation of contracts and portfolio optimization accounted for in 2020. The adjustments mainly refer to accounting effects of certain commodity derivatives (charges of 2,135 million EUR in GGP division and gains of 1,995 million EUR in EGL, Power and Renewables division) driven by the growth of natural gas prices. In the Refining & Marketing & Chemicals, net charges of 1,106 million EUR were incurred, mainly due to impairment losses taken at operated refineries and joint operations in Italy and in Europe, leading to the complete write-off of the stated book values, which were driven by the projections of expected lower future cash flows on the back of a deteriorated margin environment, and the forecast of higher expenses for emission allowances.

Table 3: The development of corporate divisions in 2021 I Source: Interim Consolidated Report as of September 30, 2021

Eni S.p.A. according to individual corporate divisions in 2021								
in million EUR	Exploration & Production		Global Gas & LNG		Refining & Marketing & Chemicals		EGL, Power & Renewables	
	2020	2021	2020	2021	2020	2021	2020	2021
Sales from operations	10,095	14,469	4,853	10,630	18,783	27,948	5,414	7,136
Operating profit	(1,164)	6,000	(42)	(1,965)	(2,324)	284	256	2,887
Adjusted operating profit	745	5,663	427	44	110	256	333	374
Adjusted net profit (loss)	(504)	3,285	290	2	(41)	166	234	273

Adjusted net profit in the first nine months of 2021 amounted to 2,306 million EUR, up by 3.4 billion EUR compared to the previous year (30 September 2020: -808 million EUR), which was favorably influenced by the better performance of at equity accounted investments and normalized tax rate. The Group generated a net cash flow from operations of 8.1 billion EUR, driven primarily by better performance in upstream activities, allowing the Company to cover its net capex (4 billion EUR), pay interim dividends for 2021 (cash out of 1.5 billion EUR), and to start the 400 million EUR share buyback program, of which 197 million EUR was paid as of October 2021.

The reported shareholder's equity increased by 2,787 million EUR to 40,280 million EUR due to the net profit for the period (2.32 billion EUR) and emission of hybrid bonds for 2.0 billion EUR in May 2021, and was offset by the dividend payments (2.4 billion EUR, of which 1.5 billion EUR interim dividend for 2021). Net borrowings remained almost unchanged at 16,622 million EUR (31.12.2020: 16,586 million EUR).

For the financial year 2021, the Company expects cash flow from operations before changes in working capital of approximately 12 billion EUR, an organic capex of 6 billion EUR, of which 4.6 billion EUR in the Exploration & Production segment, and a reported leverage of 0.28. The hydrocarbon production is expected to reach 1.7 million boe/d, partly due to the upgraded target for new explorations of 700 million boe from previously 500 million boe, mainly because of the significant discovery in the Ivory Cost.

Overall, Eni was able to prove the resilience of its business model - not least thanks to relatively low exploration costs - and developed a wide-ranging package of cost- and liquidity-saving measures which allowed it to withstand the crisis period. The Group's good access to the financial market, and the issuance of hybrid bonds, insured robust liquidity during the crisis period and made it possible for balance sheet indebtedness to remain at its pre-crisis level.

The Company's strategy is developed in line with its major goal of becoming completely emission-free (Scope 1, 2 and 3) by 2050 according to the statements of the Paris agreement. It is based on a step-by-step transformation of the business model through the expansion and diversification of the retail business and renewables, as well as investing in, developing, and increasing the business share of new technologies such as CO2 capture, production of bio-fuels, use of energy from the ocean, production of hydrogen, and innovative recycling technologies.

Aiming to reduce the dependency on global economic cycles and oil prices, and with a view to the global goal of achieving emission neutrality, the Company has set a range of measures for the period of 2021-2024 which should ensure a stable liquidity position for the Company by growing in new business areas. For this period, the envisaged capex amounts to 27 billion EUR, of which 20% is related to renewables, decarbonization and recycling projects. 55% of the total capex remains uncommitted. Dividend payments and share buyback programs will depend on oil market prices. For the next four years, Eni has introduced an expenditure ceiling of approximately 400 million EUR for the exploration phase, which should be possible through concentration at near-field initiatives, and a return to mature super-basins in Africa, Norway, Southeast Asia and the Gulf of Mexico. The development of hydrocarbon reserves will concentrate on assets with high cash generation and low break-even. The gas share in the production mix is intended to be raised to 60% by 2030 and to over 90% by 2050. The GGP business is expected to become more integrated in the Company's upstream activities, along with an increase of the LNG share and of long-term supply contracts. In the Refining & Marketing business, the Company plans to reduce its exposure to volatile prices and demand by investing in further processing, development of new distribution channels and markets, focus on circular economy projects, as well as enlarging the supply of low-carbon products (bio-fuels, hydrogen, electric charging) at the service stations. In EGL, the customer portfolio will grow, together with generation capacity through renewables. The decarbonization process also includes projects for enhancing energy efficiency, deployment of negative emissions technologies, and forestry.

With its integrated business model, the Company is well established in the market and has a fundamentally solid position. Even though the level of the Eni's financials has deteriorated due to the consequences of the COVID-19 pandemic in 2020, we expect a stabilization of results as well as an improved cash flow generation in the coming years, (as can already be seen in the Group results for Q3 2021), which should have a positive impact on the Company's profitability and financial stability ratios. In spite of the last financial year's downward trend in earnings and profits, the Group's liquidity situation is adequate and should allow corresponding room for maneuver for the expected investments.

Issue rating

Further issuer ratings

In addition to the rating of Eni S.p.A., the following Issuer and its issues (see below), have been rated.

- Eni Finance International SA (issuer)

Eni Finance International SA was incorporated under the laws of the Kingdom of Belgium on 22 December 1995 for an indefinite duration in the form of a limited liability company and operates under the laws of the Kingdom of Belgium. Eni S.p.A. directly owns 33.61 per cent of issuer's share capital and indirectly owns, through a company incorporated under the laws of The Netherlands, the remaining 66.39 per cent. According to its articles of association, the corporate purposes of the issuer are, inter alia, to carry out activities in Belgium and abroad, for the exclusive benefit of companies held directly or indirectly by Eni S.p.A. Such activities consist mainly of the provision of financial services such as granting loans on a short, medium and long-term basis, granting financial guarantees, liquidity management, hedging currency risks and interest rate fluctuations, insurance, risk management and fund raising.

Due to the corporate, strategic, liability, financial, economic and performance-related interdependencies of the issuer and Eni S.p.A. we derive the unsolicited issuer rating of the subsidiary from the unsolicited issuer rating of Eni S.p.A. and set it equal to its rating of BBB+/stable.

Issue rating details

The rating objects of this issue rating are exclusively the long-term senior unsecured notes, denominated in euro, issued by Eni S.p.A., and Eni Finance International SA (issuers), 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 Programme with its latest prospectus of 12 October 2021. This EMTN Programme amounts to 20 billion EUR. The notes and coupons under the EMTN Programme constitute unsubordinated, unsecured obligations of the issuers, and rank at least pari passu among themselves and all other present and future unsecured obligations of the issuers. According to the base prospectus, the notes benefit from a negative pledge provision and a cross default mechanism. We have assigned the long-term senior unsecured issues issued by Eni S.p.A. a rating BBB+/stable. This decision is mainly based on the corporate rating of Eni S.p.A.

Other types of debt instruments or issues 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 EMTN Programme according to prospectus of 12 October 2021.

Overview

Table 4: Overview of CRA Ratings I Source: CRA

Rating Category	Details	
	Date	Rating
Eni S.p.A. (Issuer)	03.11.2021	BBB+ / stable
Eni Finance International SA (Issuer)	03.11.2021	BBB+ / stable
Long-term Local Currency (LC) Senior Unsecured Issues	03.11.2021	BBB+ / stable
Other	--	n.r.

Table 5: Overview of 2021 Euro Medium Note Programme I Source: Base Prospectus dated 12.10.2021

Overview of 2021 EMTN Programme			
Volume	EUR 20,000,000,000	Maturity	Depending on respective bond
Issuer / Guarantor	Eni S.p.A. (Guarantor) Eni Finance International SA	Coupon	Depending on respective bond
Arranger	Goldman Sachs International	Currency	Depending on respective bond
Credit enhancement	none	ISIN	Depending on respective bond

All future LT LC senior unsecured notes issued by Eni S.p.A. and Eni Finance International SA with similar conditions to the current EMTN Programme, 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 EMTN Programme. Notes issued under the Programme in any currency other than EUR, 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 Programmes and issues not denominated in EUR, will not be assessed.

Appendix

Rating history

The rating history is available under:

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

Table 6: Corporate issuer rating of Eni S.p.A. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial Rating	26.04.2019	03.05.2019	Withdrawal of the rating	BBB+ / stable

Table 7: Corporate issuer rating of Eni Finance International SA | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	26.04.2019	03.05.2019	Withdrawal of the rating	BBB+ / stable

Table 8: LT LC senior unsecured issues issued by Eni S.p.A. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	26.04.2019	03.05.2019	Withdrawal of the rating	BBB+ / stable

Table 9: LT LC senior unsecured issues issued by Eni S.p.A. | Source: CRA

Event	Rating date	Publication date	Monitoring period	Result
Initial rating	26.04.2019	03.05.2019	Withdrawal of the rating	BBB+ / stable

Regulatory requirements

The rating[2] 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.

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	2.3	29.05.2019
Government-related Companies	1.0	19.04.2017
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
Elena Damijan	Lead-analyst	E.Damijan@creditreform-rating.de
Natallia Berthold	Analyst	N.Berthold@creditreform-rating.de

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

Name	Function	Mail-Address
Philipp Beckmann	PAC	P.Beckmann@creditreform-rating.de

On 3 November 2021, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the Company on 3 November 2021. 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.

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:

<u>Corporate issuer rating:</u>

1. Annual report
2. Website
3. Internet research

<u>Corporate issue rating:</u>

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.

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