Creditreform Corporate Issuer / Issue Rating
Repsol S.A.

Creditreform Rating

21 March 2024 – Neuss, Germany

Rating Action / Update:

Creditreform Rating has affirmed the unsolicited corporate issuer rating of Repsol S.A., at BBB+ / stable

Creditreform Rating (CRA) has affirmed the unsolicited, corporate issuer ratings of Repsol S.A. – hereafter referred as Repsol or the Company – Repsol Europe Finance S.à.r.l. and Repsol International Finance B.V., as well as the unsolicited corporate issue ratings of long-term local currency senior unsecured notes issued by Repsol Europe Finance S.à.r.l. and Repsol International Finance B.V., at BBB+ / stable. The initial unsolicited short-term rating has been set to L3 (adequate level of liquidity). In addition to this report, we also refer to the press release of 28 February 2023 and the rating report of 14 February 2022, which contain further relevant information with respect to the structural, business and financial risks of the Company.

Analysts

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Current relevant factors for the rating

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

+ Strong operating performance in 2023, despite falling energy prices and slowing margins in Industrial business compared to 2022
+ Improved, solid financial structure, largely due to a 25% share sale of Repsol's Upstream business and its asset rotation measures
+ Cautious financial strategy, with the aim of maintaining its sound credit profile
+ Progress on its business model transformation by focusing on low carbon initiatives and value-creating assets to be on track with the energy transition and to increase profitability

- Progressive shareholder policy through increasing dividend payments and launching new share buyback programs
- Still volatile market conditions reinforced by current geopolitical tensions
- High investment and technological requirements; stricter regulation measures aimed at acceleration of the energy transition

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.

ESG-criteria:

CRA generally considers ESG factors (environment, social and governance) within its rating decisions. In the case of Repsol S.A. we have identified ESG factors with significant influence on the following categories, which are 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 in the short to medium-term as a result of changes in the market and regulatory environment (stranded asset risk)
– (E): Mid- to long-term risks for the business model of the oil and gas industry, as well as financing, e.g., related to EU-Taxonomy

We see risks to Repsol's current business model in the medium to long term due to societal and political changes with regard to fossil fuels, based on European and international environmental and climate protection targets. Global efforts towards decarbonization lead us to expect significant shifts in the demand for fossil fuels in the medium to long 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 its product portfolio and investments in technologies with the aim to limit CO_2 emissions. Current trends in automobile registrations imply likely shifts and a general decline in demand for refined products. In addition, these tendencies could have an influence on the behavior of investors, which could lead to difficulties in access to capital markets. Repsol has already recognized impairment charges related to environmental constraints and the accelerated energy transition in recent years.

We nevertheless 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. The long-term goal of the Company is to establish a new operating model; a hybrid energy model that combines electrification with low-carbon fuels, advanced biofuels, synthetic fuels, and renewable hydrogen fuels, the latter to serve long-distance road transport, as well as the maritime and aviation industries. In line with the Paris Agreement, Repsol's strategy is aimed at the fundamental target of complete climate neutrality (scope 1, 2 and 3) by 2050. By 2030, Repsol plans to have installed capacity of renewable energy of 20 GW and to produce 2 million of tons of waste-based biofuels and synthetic fuels from water and CO_2 by 2030. For the period 2024-2027, the Company plans to invest more than 35% of its planned net investments ranging between EUR 16 and 19 billion in low carbon initiatives targeting to reach between 9,000 and 10,000 MW of installed capacity by 2027 and to develop low emission products such as renewable fuels, renewable hydrogen, and biomethane.

The Company's strong investments, which are planned based on Repsol's decarbonization trajectory, could weigh on credit metrics; however, we consider them as essential to protect its cash flow generation ability in the long-term, by transforming its business model into one in line with the energy transition. The Company has already made strategic progress over recent years, which has already contributed to the generation of its solid results. Its advanced biofuels plant in Cartagena started within the first quarter of 2024. With the aim of financing its ambitious decarbonization targets, the Company releases additional cash by entering into new strategic partnerships, and by rotating assets. Due to the strategic importance of its sustainability-oriented projects, numerous institutions, such as the European Invesment Bank, also support the project financing.

We consider Repsol's measures to be both positive and plausible; nevertheless, market conditions could change significantly in the long-term due to a stricter regulatory environment or disruptive technologies adversely affecting the industry. Still, innovative efforts are needed to decarbonize the energy sector. In addition, to high CO_2 emission, the oil and gas industry entails further environmental risks, as the oil spill in Peru[1] in 2022 shows. Two years after the incident,

[1] On 15 January 2022, the Hunga Tonga-Hunga Ha'apai volcano in the South Pacific state of Tonga triggered very high tidal waves far from the site of the eruption. As a result, crude oil leaked during the unloading of the tanker Mare Doricum at Repsol's refinery, la Pampilla in the port province Callao in Peru, polluting 21 beaches along the country's coast. Approximately 12,000 barrels of oil spilled into the water, affecting an area of up to 9 million square meters. Seabirds and marine animals have been affected by the oil spill, resulting in heavy losses for fisheries and tourism. The government of Peru declared a state of emergency.

lawsuits are still pending. Depending on the legal outcome, the resulting consequences for Repsol could have further implications for the rating. In addition to monetary penalties, it is also conceivable that there could be international consequences in the form of further production bans due to a high risk of accidents. Since offshore production is associated with far-reaching environmental risks, countries such as France and Denmark have already banned exploration for oil and gas in their waters.

Overall, we see that Repsol has a strongly integrated ESG culture. Nonetheless, the industry is subject to strict environmental policies and technologically disruptive processes that have had already a material impact on Repsol's financials. Due to the Company's specific goals and active measures to improve its sustainability, we currently see the negative effects of ESG factors as limited to one notch with regard to the current business model risk.

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 Repsol S.A. a highly satisfactory level of creditworthiness, representing a low-to-medium default risk. The rating result is based on the Company's strong position in its relevant geographical markets, especially its leading market position in Spain and its high level of product and geographical diversification. As expected, the Company showed declines in revenues and results compared to 2022, largely as a result of the normalization of energy prices and slowing industrial margins, but still displays strong operating performance. In addition, the rating is underpinned by Repsol's solid financial structure, its adequate liquidity, and its capital market access. We further consider Repsol's strategic measures to strengthen financial headroom for its decarbonization program as supportive to the rating. Repsol's strategy is based on building a multi-energy low-carbon model in the long term via own funds and strategic alliances. However, the business model is still fossil fuel-focused and thus vulnerable to regulatory, reputational and technical factors, dampening its profitability. We consider this as an ESG factor, adversely impacting the rating by one notch.

Outlook

The one-year outlook for the unsolicited corporate issuer rating of Repsol S.A. is stable. Despite expecting an ongoing normalization of energy prices, we assume an overall positive performance for Repsol in the next years. Considering Repsol's improved financials and strategic measures aimed at strengthening financial headroom and increasing its profitability, we assume that the Company will be able to continue its transformation process without significant impact on its key metrics, despite ongoing challenging market conditions. The overall economic environment is still marked by uncertainty with regard to geopolitical tensions and their economic consequences, as well as volatile commodity prices and further possible stringent government and environmental policies. Its committed financial policy also underpins the stable 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.

Best-case scenario: A-

In our best-case scenario for one year, we assume a rating of A-. In this scenario, Repsol's operating performance benefits further from continuing high energy prices and improvements in its transformation process. The Company shows significantly improved operating margins and profitability ratios. Its cash flows are sufficient to cover the Company's investment requirements and increasing shareholder distributions, maintaining stable - or even improving - net financial debt level, enabling the Company to generate a net total debt / EBITDA, adj. ratio under 3x. In addition, the market conditions have stabilized, in particular with regard to geopolitical tensions and their economic consequences, e.g., energy price volatility, fear of recession, disruptions in supply-chains, and high interest rates, which could adversely affect the Company's overall economic activities.

Worst-case scenario: BBB

In the worst-case scenario for one year, we assume a rating of BBB. In this scenario, we assume deteriorated operating performance linked to volatile energy prices and/or an economic downturn. Increase in net debt and interest burden driven by the Company's transformation process to a hybrid energy model, could also lead to a downgrade. Moreover, stricter regulatory measures could dampen earnings potential and restrict cash flow potential needed to sufficiently offset its high investment requirements.

Business development and outlook

Table 1: Financials of Repsol S.A. I Source: Repsol S.A. Annual Report 2023, standardized by CRA

Repsol S.A. Selected key figures of the financial statement analysis Basis: Annual accounts and report of 31.12. (IAS, Group)	CRA standardized figures[2]	
	2022	**2023**
Sales (million EUR)	75,153	58,948
EBITDA (million EUR)	7765	6972
EBIT (million EUR)	5,426	4,536
EAT (million EUR)	4,345	3,284
EAT after transfer (million EUR)	4,251	3,168
Total assets (million EUR)	56,595	56,464
Equity ratio (%)	42.49	46.85
Capital lock-up period (days)	24.46	30.32
Short-term capital lock-up (%)	13.41	14.60
Net total debt / EBITDA adj. (factor)	2.48	3.30
Ratio of interest expenses to total debt (%)	1.28	1.50
Return on Investment (%)	8.07	5.74

[2] 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.

Despite a significant decline in results, Repsol displayed an overall strong operating performance in 2023. CRA adjusted EBITDA amounted to EUR 6,972 million (2022: EUR 7,765 million), down by 10.2% compared to 2022. The decline was largely related to the normalization of energy prices, including a significant fall in crude oil, gas fuel and electricity prices substantially affecting the Company's Upstream and Low Carbon Generation business. Despite the significant decline in energy prices, it remains noteworthy that average energy prices continue to be significantly higher, than pre-crisis levels, with reference to 2019. The high demand for crude oil, in combination with OPEC+ cuts, led to still high price levels.

Table 2: Average energy price development I Source: Annual Report 2023 and 2019, reported information, own presentation

	2019	2022	2023	Δ % vs. 2022
Brent Crude USD/per barrel	64.2	101.3	82.6	-18.5
Henry Hub USD/MBtu	2.6	6.6	2.7	-59.1
Electricity Pool – OMIE (EUR /MWh)	47.7	167.7	87.4	-47.9

Table 3: The operating income development of Repsol's main business segments I Source: Consolidated Annual Financial Report 2023, reported information

Repsol S.A,				
In million EUR	**2022**	**2023**	**Δ**	**Δ %**
Upstream	5,705	2,936	-2,769	-48.5
Industrial	4,315	3,626	-689	-16.0
Customer	564	819	255	45.2
Low Carbon Generation	245	134	-111	-45.3

Repsol's Industrial business also showed a decrease in results, impacted by lower refining and chemical margins as a result of lower demand, affected by the economic slowdown and product prices, while the Customer division recorded growth, benefitting in particular by ending the discounts established by the Spanish government for fuel in 2022. The decline in Repsol's Group results was also partly offset by higher production capacity in Upstream, no incidents in Libya, and significantly lower adverse special items effects than in the year before. The average hydrocarbon production came to 599 Kboe/d[3] (2022: 550 Kboe/d), up by 9% compared to 2023, in particular driven by its new wells at Marcellus and Eagle Ford (United states).

Special items, amounting to EUR 1.274 million (2022: EUR 2,507 million), were largely due to asset impairments and the temporary Spanish energy levy, as well as the impact of settlements in connection with the closing of lawsuit cases with Maxus and Sinopec.

Cash flow from operating activities amounted to EUR 6,511 million (2022: EUR 7,832 million), down by 16.8%. The change in working capital of EUR 878 million due to lower inventory in the wake of the price decreases had a positive impact on its cash flow. To accelerate its decarbonization plan, Repsol increased its investments. Operating Investments rose from EUR 4.2 billion

[3] Thousand barrels of oil per day

in 2022 to EUR 6.2 billion, with 43% of its investments allocated to assets in the Iberian Peninsula and 30% allocated to renewable generation assets. As a result net cash flow after investments amounted to EUR 658 million (2022: EUR 3,729 million). Despite significantly higher Investments and a rise in dividend distribution and its share buyback program, the Company was able to slightly reduce reported net financial debt from 2.3 billion to EUR 2.1 billion. This was possible also due to its asset rotation strategy, divesting in less attractive assets, as well as involving strategic partners such as EIG Global Energy Partners group (EIG).

In order to strengthen its cash resources, Respol sold 25% of its Upstream business for approximately USD 3.4 billion in March 2023 to EIG. The Company received EUR 1.9 billion during 2023, with the remainder to follow in the next three years. In the fourth quarter of 2023, the Company closed its arbitration process with an agreement with Sinopec, taking control over the whole of the UK North Sea business.[4] The acquisition will have a net cash outflow impact of roughly USD 1.1 billion for Repsol. Payment is expected in the second quarter of 2024, but the liability has already been recognized in the Group's net debt as of December 2023. For 2023, the CRA-adjusted leverage ratio net total debt to EBITDA adj. stood at 3.3x (2022: 2.5x), representing a solid value and still containing a certain buffer sufficient to maintain its current credit rating.

The increase in equity and the reduction in liabilities have led to an improved financial structure. CRA's structured equity ratio improved to 46.9% (2022: 42.5%). Equity rose largely thanks to the sale of the non-controlling interests of its Upstream business and low carbon assets. In total, reported equity rose by EUR 3.1 billion to EUR 29.1 billion in 2023. Liabilities were reduced by EUR 1.4 billion, amounting to EUR 32.6 billion (2022: EUR 34.0 billion). Liquidity, including cash and cash equivalents (EUR 4.1 billion), deposits with immediate availability (EUR 3.9 billion) and undrawn committed credit lines (EUR 2.6 billion), stood at EUR 10,6 billion (2022: EUR 11,5 billion), covering short-term financial debt approx. 3.2 times, giving Repsol more than adequate financial headroom.

Nevertheless, based on Repsol's 2024-2027 Strategic Update, presented on March 2023, we expect further significant cash outflows in the coming years to advance its transformation plan and to improve its shareholder distributions. At the same time, the Company has committed to maintain its current sound credit profile. The Company has committed to raise its dividend distribution by 30% in 2024, with total expected cash outflow of EUR 1.1 billion, and thereafter to increase it by 3% p.a. In addition, the Company has planned to launch new share buyback programs, which in total are to amount to around EUR 10 billion for the entire four-year period, representing 25-35% of cash flow from operations. Its net investments are to amount to between EUR 16 and 19 billion over the entire period, allocating over 35% to low carbon initiatives. The focus of investments is on countries with a low risk profile, with the Iberian Peninsula making up 60% of total investments and the United States 25%. We therefore do not expect an increase in country risks. Based on its current assets and transformation processes, including divestments and asset rotation measures in its low carbon generation portfolio, the Company expects to generate operating cash flows (OCF) of roughly EUR 29 billion, representing an average OCF of EUR 7.3 billion p.a. In 2023, the reported OCF amounted to EUR 7.1 billion, so that its OCF would be strong enough to cover its investment and remuneration activities.

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[4] In 2012, Sinopec had initiated proceedings after contesting the USD 1.5 billion price paid by its subsidiary Addax for 49% of the company Repsol Sinopec, while Repsol owned the remaining 51%. Repsol has now acquired Sinopec's 49% stake, becoming the sole owner of the company, which is now called Repsol Resources UK.

Although market conditions are less cloudy due to lower inflation and signs of economic recovery, conditions are still marked by significant uncertainty, reinforced by current geopolitical conditions, exposing prices to high volatility. Interest rates remain high, and the fear of an economic slowdown, in particular in Europe, still persists. All of these factors have an impact on demand and price development, which could dampen the Company's profitability. Nevertheless, in recent years the Company has been able to improve its profitability through efficiency measures and building leaner structures.

Overall, Repsol showed strong business performance, despite volatile market conditions, further improving its financial position by strengthening its balance sheet and reaching new milestones on its transformation path as described in the ESG chapter. Nevertheless, the Company is still exposed to a variety of exogenous risks such as volatile energy prices as well as economic downturns. In order to maintain its profitability in the long term, the Company needs to invest significantly to be in line with the energy transition, which involves higher investment and financing risks, as well as innovation pressure. However, we see the Company as strategically and financially well-positioned to face ongoing uncertainty, enabling it to continue on its transformation path.

Further ratings

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

- Repsol Europe Finance S.à.r.l.
- Repsol International Finance B.V.

Due to the corporate, strategic, liability, financial, economic and performance-related interdependencies of the aforementioned subsidiaries (all are direct or indirect 100% subsidiaries of Repsol S.A., which have been consolidated into the group annual accounts) we derive the unsolicited issuer ratings of these subsidiaries from the unsolicited issuer rating of Repsol S.A. and set them equal to its rating of BBB+ / stable.

Based on the long-term issuer ratings and taking into account our liquidity analysis, the short-term rating of the Repsol S.A. and the above-mentioned subsidiaries was set at L3 (standard mapping), which corresponds to an adequate level of liquidity assessment for one year.

The rating objects of the issue ratings are exclusively long-term senior unsecured issues, denominated in euro, issued by Repsol S.A. and the above-mentioned subsidiaries, which are included in the list of ECB-eligible marketable assets.

Repsol S.A. is guarantor in respect of the issues that have been issued by the above listed group companies under the EMTN Programme, with the last basis prospectus of 31.05.2023 and with the last amendment of 14.11.2023.

We have provided the long-term local currency senior unsecured notes issued by Repsol S.A. and the above-mentioned subsidiaries with an unsolicited rating of BBB+ / stable. The ratings are based on the respective corporate issuer ratings.

Long-term local currency senior unsecured notes issued by Repsol S.A. and the above-mentioned subsidiaries, which have similar conditions to the current EMTN programme, denominated in euro and included in the list of ECB-eligible marketable assets, generally receive the same ratings as the current LT LC senior unsecured notes issued under the EMTN programme. Notes issued 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.

Table 4: Overview of CRA Ratings I Source: CRA

Rating Category	Details	
	Date of rating committee	Rating
Repsol S.A. (Guarantor)	21.03.2024	BBB+ / stable / L3
Repsol Europe Finance S.à.r.l. (Issuer)	21.03.2024	BBB+ / stable / L3
Repsol International Finance B.V. (Issuer)	21.03.2024	BBB+ / stable / L3
Long-term Local Currency (LC) Senior Unsecured Issues of Repsol Europe Finance S.à.r.l.	21.03.2024	BBB+ / stable
Long-term Local Currency (LC) Senior Unsecured Issues Repsol International Finance B.V.	21.03.2024	BBB+ / stable
Other	--	n.r.

Appendix

Rating history

The rating history is available under the following link.

Table 5: Corporate issuer rating of Repsol S.A. | Source: CRA

Event	Rating created	Publication date	Result
Initial rating	14.02.2022	16.02.2022	BBB+ / stable

Table 6: Corporate issuer rating of Repsol International Finance B.V. | Source: CRA

Event	Rating created	Publication date	Result
Initial rating	14.02.2022	16.02.2022	BBB+ / stable

Table 7: Corporate issuer rating of Repsol Europe Finance S.à.r.l. | Source: CRA

Event	Rating created	Publication date	Result
Initial rating	14.02.2022	16.02.2022	BBB+ / stable

Table 8: LT LC senior unsecured issues issued by Repsol International Finance B.V. | | Source: CRA

Event	Rating created	Publication date	Result
Initial rating	14.02.2022	16.02.2022	BBB+ / stable

Table 9: LT LC senior unsecured issues issued by Repsol Europe Finance S.à.r.l. | Source: CRA

Event	Rating created	Publication date	Result
Initial rating	14.02.2022	16.02.2022	BBB+ / stable

Table 10: Short-term issuer ratings of Repsol S.A., Repsol International Finance B.V. and Repsol Europe Finance S.à.r.l. |

Event	Rating created	Publication date	Result
Initial rating	21.03.2024	www.creditreform-rating.de	L3

Regulatory requirements

The rating[5] 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.

[5] 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 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

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
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
Christina Sauerwein	Lead-analyst	C.Sauerwein@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
Philip Michaelis	PAC	P.Michaelis@creditrefrom-rating.de

On 21 March 2024, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the company on 22 March 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:

<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.

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

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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.

Creditreform Rating AG

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