

# Pannonia Bio Zrt. Hungary, Chemicals


**BB+** STABLE

## Corporate profile

Pannonia Bio Zrt. owns and operates an ethanol and animal feed production facility in Dunaföldvár, Hungary. The plant has the capacity to process over 1.2m tonnes of corn annually, producing around 500m litres of ethanol, which is primarily blended into gasoline. The plant also produces around 285,000 tonnes of dried distillers grains with solubles (DDGS) and 14,000 tonnes of corn oil annually. The company has more than 300 employees.

## Key metrics

Scope credit ratios	2019	2020	Scope estimates		
			2021E	2022E	2023E
EBITDA/interest cover	32x	37x	13x	16x	24x
Scope-adjusted debt (SaD)/EBITDA	1.4x	1.8x	3.6x	2.4x	1.7x
Funds from operations/EBITDA	67%	53%	25%	38%	56%
Free operating cash flow/SaD	33%	19%	-10%	33%	26%

## Rating rationale

**Scope Ratings has affirmed the BB+/Stable issuer rating on Pannonia Bio Zrt. as well as the BBB senior secured debt rating. Scope has downgraded the senior unsecured debt rating to BB+ from BBB-.**

The issuer rating mainly reflects the company's highly efficient plant (ESG: credit-positive environmental risk factor), whose large scale and favourable location lead to competitive operating costs and solid overall profitability. Challenges include a strong exposure to very volatile commodities, very weak asset and product diversification, and no current exposure to low-cyclicality speciality products.

Despite very volatile ethanol prices during 2020, crush margins on average have reached historical highs, helping to generate a record EBITDA of EUR 118m. The commodity price environment remains challenging. Prices for main input and output commodities have increased materially since the start of 2021, with crush margins somewhat below the multi-year average. Nevertheless, the company benefits from recent investments to optimise production processes and develop higher-value products, resulting in a conservative EBITDA forecast of around EUR 70m in 2021, well above that achieved in 2017, a year of more favourable commodity prices.

We expect a temporary increase in leverage, as measured by Scope-adjusted debt(SaD)/EBITDA, to above 3x in 2021 before recovering to below 2.5x in the next few years. This will be mainly driven by conservative commodity price assumptions as well as significant investment. The investments will be largely funded from available cash and the solid operating cash flow. In addition, the company has several funding options including an unutilised EUR 35m working capital facility.

## Ratings & Outlook

Corporate rating	BB+/Stable
Senior secured rating	BBB
Senior unsecured rating	BB+

## Analyst

Marlen Shokhitbayev, CFA  
+49 30 27891 127  
m.shokhitbayev@scoperatings.com

## Related methodologies

Corporate Rating Methodology

Rating Methodology: Chemical Corporates

## Scope Ratings GmbH

Lennéstraße 5  
10785 Berlin

Tel. +49 30 27891 0  
Fax +49 30 27891 100

info@scoperatings.com  
www.scoperatings.com

Bloomberg: SCOP

### Outlook and rating-change drivers

The Stable Outlook reflects our expectation of resilient operating performance as well as only a temporary increase in leverage due to large investment spending, with Scope-adjusted debt/EBITDA reaching above 2.5x. The Outlook also anticipates that the company will ensure leverage is kept under control and funding remains flexible. Our rating case does not assume any dividend payments nor repayments of shareholder loans before 2023.

A negative rating action could be triggered by a deterioration in credit metrics, e.g. if SaD/EBITDA increased above 2.5x for a prolonged period.

A positive rating action appears unlikely under the current business setup but could be triggered by significant improvements in diversification and outreach.

#### Rating drivers

Positive rating drivers	Negative rating drivers
<ul style="list-style-type: none"> <li>Ethanol plant among the largest and most efficient in Europe (ESG: credit-positive environmental risk factor), as measured by production capacity and EBITDA margins, respectively</li> <li>Proximity to low-price corn-producing areas and good logistical infrastructure</li> <li>Operating costs among the lowest in the industry</li> <li>Strong financial risk profile relative to business risk profile, even after large dividend payments in 2019 and 2020</li> <li>Sound liquidity position</li> </ul>	<ul style="list-style-type: none"> <li>Very high asset concentration, with a single plant as the core asset</li> <li>Weak product diversification, with commodities as output and ethanol representing four-fifths of revenues</li> <li>Strong exposure to very volatile commodities (corn and ethanol), though partly offset by correlation in DDGS/corn prices</li> <li>No exposure to speciality products with low cyclicalities, but the company is investing in the development of such products</li> </ul>

#### Rating-change drivers

Positive rating-change drivers	Negative rating-change drivers
<ul style="list-style-type: none"> <li>Unlikely under current business setup but could be triggered by significant improvements in diversification and outreach</li> </ul>	<ul style="list-style-type: none"> <li>SaD/EBITDA of above 2.5x on a sustained basis</li> </ul>



## Financial overview

			Scope estimates		
Scope credit ratios	2019	2020	2021E	2022E	2023E
EBITDA/interest cover	32x	37x	13x	16x	24x
SaD/EBITDA	1.4x	1.8x	3.6x	2.4x	1.7x
Funds from operations/SaD	67%	53%	25%	38%	56%
Free operating cash flow/SaD	33%	19%	-10%	33%	26%
<b>Scope-adjusted EBITDA in EUR m</b>					
EBITDA	112.8	117.6	68.9	77.8	90.5
Operating lease payments in respective year	-	-	-	-	-
Scope-adjusted EBITDA	112.8	117.6	68.9	77.8	90.5
<b>Scope-adjusted funds from operations in EUR m</b>					
Scope-adjusted EBITDA	112.8	117.6	68.9	77.8	90.5
deduct: (net) cash interest paid	-3.5	-3.1	-5.4	-5.0	-3.8
deduct: cash tax paid	-1.7	-0.8	-1.3	-1.4	-1.8
add: depreciation component, operating leases	-	-	-	-	-
Scope-adjusted funds from operations	107.6	113.6	62.2	71.4	84.9
<b>Scope-adjusted cash interest in EUR m</b>					
Net cash interest paid (Scope estimates)	3.5	3.1	5.4	5.0	3.8
Interest element of operating leases	-	-	-	-	-
Scope-adjusted cash interest	3.5	3.1	5.4	5.0	3.8
<b>Scope-adjusted debt in EUR m</b>					
Reported gross financial debt	212.1	260.6	272.6	212.1	161.0
deduct: available cash & cash equivalents	-45.4	-34.2	-21.1	-22.7	-10.2
deduct: equity credit for shareholder loans	-5.2	-12.8	-	-	-
add: pension adjustment	-	-	-	-	-
add: operating lease obligations	-	-	-	-	-
Scope-adjusted debt	161.5	213.6	251.5	189.4	150.9

### Business risk profile

The business risk profile reflects our assessment of the industry in which the company operates and its competitive position within that industry.

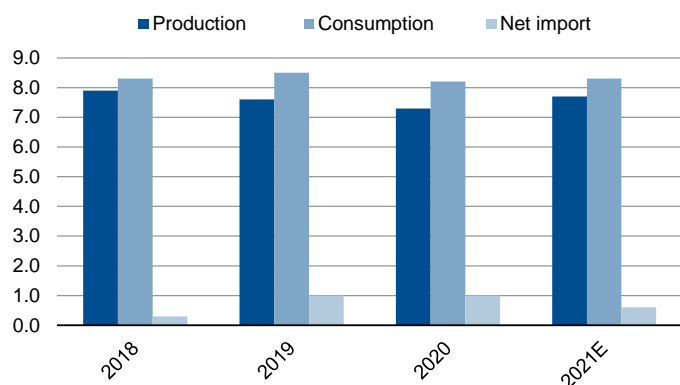
#### Semi-protected EU market for ethanol

Ethanol is Pannonia Bio's main output product, currently accounting for four-fifths of its revenues. Our analysis focuses on the European rather than the global ethanol market. This is because the EU ethanol market is protected by import tariffs and significant shipping costs, which have served to limit imports to less than 20% of total consumption over the past several years.

#### No uplift from industry risk profile for integrated chemical companies

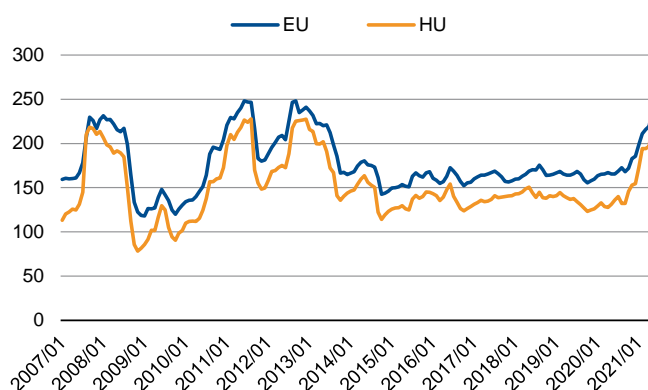
Import tariffs constitute the sole financial incentive for bioethanol producers – which clearly differentiates them from other renewable energy producers such as wind or photovoltaic parks. We have therefore treated Pannonia Bio as a commodity chemicals producer and applied our rating methodology for chemical corporates. We classify the company as an integrated chemical producer based on its plans to expand into speciality products. However, we will not incorporate any uplift to the ratings based on the BBB industry risk assessment for integrated chemical companies until the share of Pannonia Bio's speciality products reaches a critical size.

Figure 1: EU+UK ethanol market (million cbm)



Source: IHS Markit, Scope

Figure 2: Feed corn price (EUR/t)



Source: Eurostat, Scope

#### Large plant size enables significant economies of scale and market relevance

Pannonia Bio's competitive position benefits from its plant's large size, which enables significant economies of scale and market relevance. With a current ethanol production capacity of around 500m litres per year, the plant is one of the largest in the EU and accounts for 6%-7% of the region's production. In addition, the company works with selected industry players to optimise the production and distribution of its products.

#### Proximity to low-price corn-producing areas and good logistical infrastructure

The plant further benefits from its proximity to low-price corn-producing areas in Hungary, Slovakia, Croatia, Serbia and Romania. It is located on the bank of the Danube River and has a good logistical infrastructure including direct access for trucks, trains and barges.

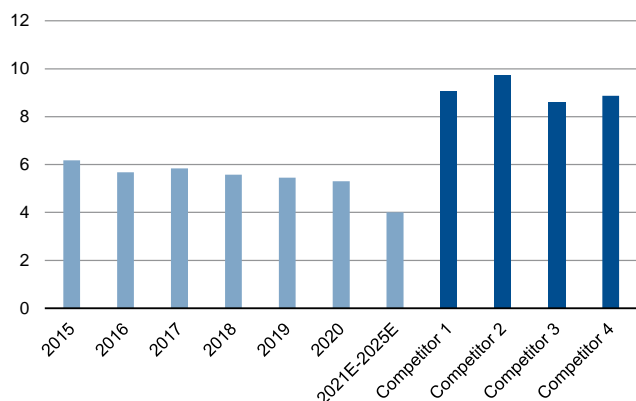
#### Operating costs among the lowest in the industry

The abovementioned factors together with continuous investment in efficiency initiatives make operating costs for the plant among the lowest in the industry (ESG: credit-positive environmental risk factor). According to management, the plant has always aimed to maximise output since operations started in 2012, even in the challenging price environments of 2014 and 2018 as well as during the Covid-19 lockdowns in 2020, when certain producers had to (temporarily) shut down facilities. In 2020, lower ethanol sales for fuel were offset by sales for the purpose of hand sanitisers and other disinfectants.

#### Solid profitability

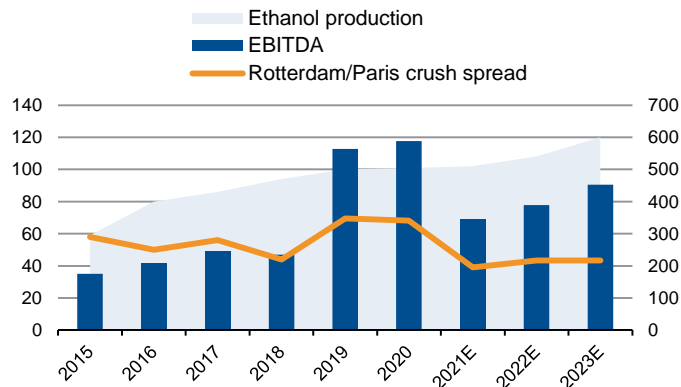
As a result, the company has solid profitability with historical and projected EBITDA margins of between 15% and 30%. This is one of the key positive rating drivers.

**Figure 3: Gas consumption (MJ/litre)**



Source: Pannonia Bio

**Figure 4: EBITDA (lhs, EUR m) as a function of market prices (rhs, EUR/t), plant efficiencies and production volumes (rhs, m litres yearly)**



Source: Pannonia Bio, Scope

**Very high asset concentration**

Pannonia Bio's business risk profile is restricted by very high asset concentration, with a single plant as the core asset. This is still the case despite investments in biogas plants in Slovenia, due to their small size. The company addresses this risk mainly through extensive insurance coverage against severe damage, which would allow the company to preserve asset values and service at least one year of debt payments.

**Industrial accident in October 2020**

In October 2020, a human error caused the release of chlorine gas at the plant. 28 people were hospitalised but they were quickly discharged as injuries were not serious. The incident had no impact on the nearby residential area or on the environment. Production continued uninterrupted. Six authorities launched investigations; some are ongoing. Management states that it has taken measures to improve operational safety following the accident. It has also stated that the overall financial impact is immaterial and no negative implications are anticipated from the ongoing investigations.

**Weak product diversification and high volatility in commodity prices...**

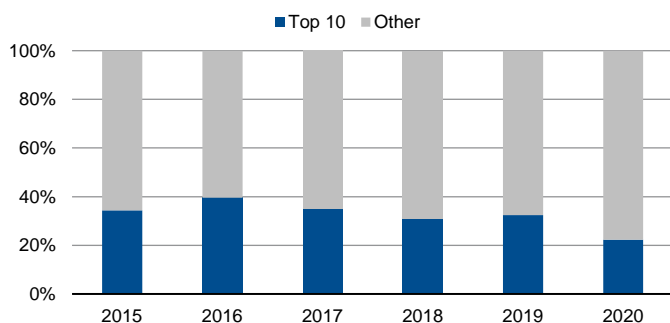
Performance volatility may also arise from weak product diversification. All of Pannonia Bio's main products are commodities, with a dominant share of ethanol. Furthermore, commodity prices, such as for corn or ethanol, are highly volatile. Pannonia Bio is a pure price-taker. In the event of extremely low or negative spreads between input and output prices, also known as a crush spread, the company may have to suspend operations. However, we deem any prolonged production interruption resulting from low crush spreads to be unlikely, mainly because of the company's low costs. In such a challenging price environment, most market players with less favourable cost structures would cease operations first, thus reducing the overall supply of ethanol, with positive implications for prices. This occurred, for example, in 2018, when two plants halted production in Europe, while Pannonia Bio was still able to generate positive margins.

**...are partly offset by correlation in DDGS/corn prices and ongoing investments**

The high volatility in commodity prices is partly offset by the strong correlation between DDGS and corn prices ('natural hedge'). The company is also addressing this issue by further optimising production processes and developing higher-value products, which should boost margins while reducing the volatility of overall performance. Recently completed projects include a new evaporator with reduced energy consumption and a biogas plant with a related fertiliser facility. Pannonia Bio is continuing with its large investment programme, mainly in the barley plant (to process barley in addition to corn), alcohol plant (to high-grade ethanol), the thin stillage retentate drying plant (to produce animal feed with higher protein content) and biomethane plant (to convert biogas into

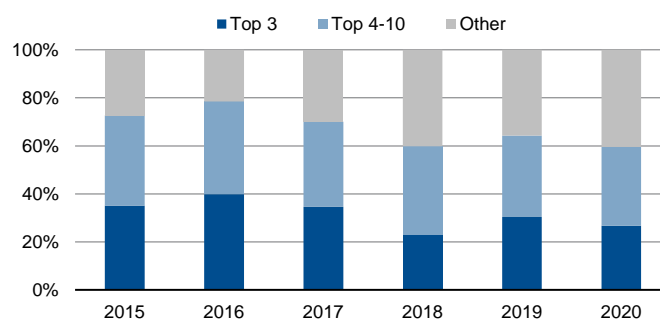
biomethane). Some of the projects were delayed due to Covid-19, and increased commodity prices may lead to moderate cost overruns for ongoing projects.

**Figure 5: Supplier concentration**



Source: Pannonia Bio, Scope

**Figure 6: Customer concentration**



Source: Pannonia Bio, Scope

**High customer concentration mainly mitigated by solid credit quality of counterparties**

The company has relatively low supplier concentration with the top 10 accounting for 20%-40% of total purchases over the past few years. In contrast, customer concentration is high, with the top 10 representing 60%-80% of total revenues. However, the associated credit risk is mainly mitigated by the solid credit quality of counterparties. Ethanol and animal feed are sold across Europe, mainly to Germany, Italy, Romania and Poland.

### Financial risk profile

#### Key planning assumptions

Our financial projections are mainly based on the following assumptions:

1. Ethanol (Rotterdam) at around EUR 600/cbm in 2021 and EUR 550/cbm in 2022-23; corn (Paris) at EUR 230/tonne in 2021 and EUR 200/tonne in 2022-23
2. Growth in ethanol production, from around 500m litres p.a. in 2020 to 600m litres p.a. in 2023
3. Total investments including maintenance capex of around EUR 100m in 2021 and EUR 40m-45m in 2022-23; disposal of solar projects in 2022
4. Repayment of shareholder loans and payment of ordinary dividends of up to 50% of net profit if surplus cash available (according to rating case in 2023 for shareholder loans and starting in 2024 for dividends)
5. No issuance of new debt
6. Upsized EUR 35m working capital facility utilised in 2021

**Weaker credit metrics going forward, mainly due to major dividend and investment in 2020...**

We expect Pannonia Bio's credit metrics to weaken following the substantial dividend payment in 2020 and the ongoing significant capital expenditure. These factors are partly offset by the plant's increasing operational efficiency and scale.

Leverage as measured by SaD/EBITDA was 1.8x in 2020. It was significantly supported by the record EBITDA of EUR 118m on the back of high crush margins and strongly burdened by the large dividend payments and investment spending during the year.

**...as well as conservative commodity price assumptions and high capex going forward**

We expect a temporary increase in SaD/EBITDA above 3x in 2021 before recovering to below 2.5x in the next few years. This will be mainly driven by conservative commodity price assumptions as well as significant investment levels. The investments will be largely funded from available cash and the solid operating cash flow. In addition, the company has several funding options including an unutilised EUR 35m working capital facility.

**Further increase in leverage limited by covenants and increasing operational efficiency**

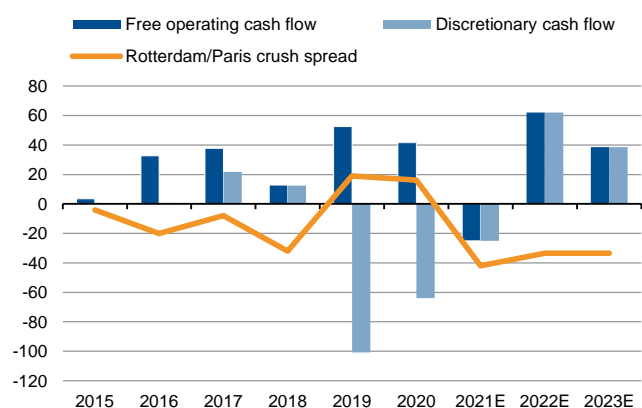
We understand that the dividends and investments are subject to financial performance and to covenants set by the bank loan agreement. The company must obtain approval from bank lenders to (temporarily) exceed predefined thresholds. Additionally, according

to management, all shareholders are ready to fund the business as and when needed. Leverage is further supported by the plant's increasing operational efficiency and scale. For 2021-23, we have conservatively assumed price spreads at the lower end of the range seen in the past five years. We expect the company to perform more strongly under these conditions than in a better price environment, e.g. in 2017.

**Strong interest cover**

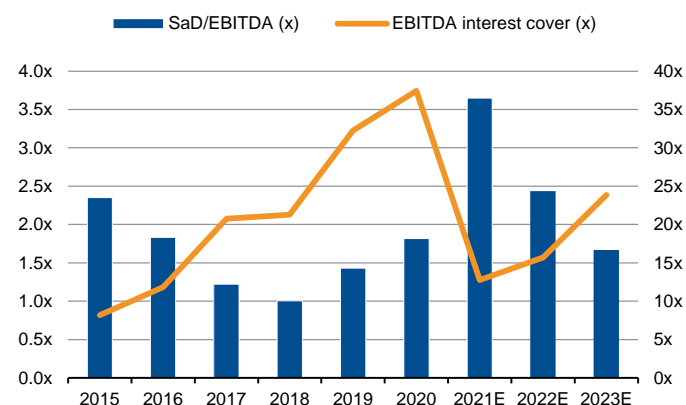
Pannonia Bio's EBITDA/interest cover was comfortably above 7x at YE 2020 and is expected to remain strong over the next couple of years.

**Figure 7: Cash flow generation (lhs, EUR m) vs crush spread (rhs, EUR/t)**



Source: Pannonia Bio, Scope

**Figure 8: Leverage (lhs) and interest cover (rhs)**



Source: Pannonia Bio, Scope

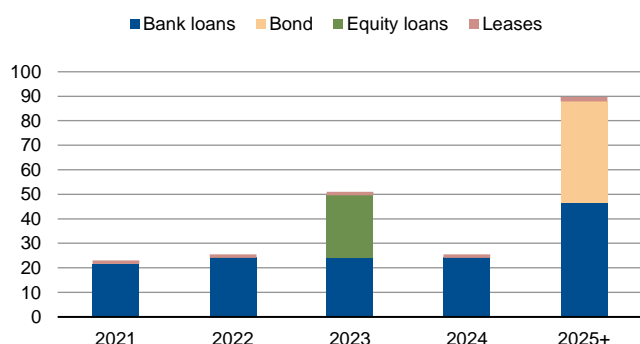
**Solid internal financing capacity**

The company's operating cash flow is sufficient to cover maintenance and large parts of the development capex at the projected level, indicating a solid internal financing capacity. External financing may, however, be required for substantial development projects.

**Key adjustments**

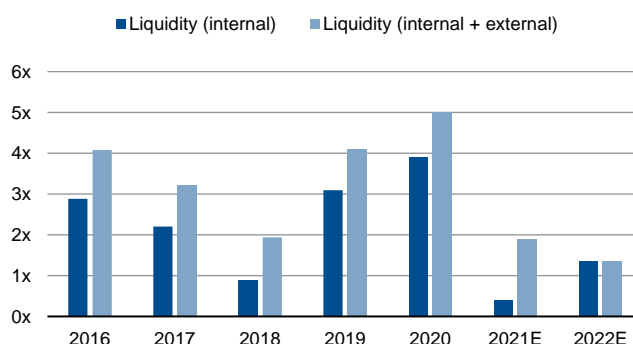
In line with our conservative approach, our SaD calculation includes restricted cash of EUR 1m. We removed a 50% equity credit of the shareholder loans from our SaD calculation, based on their expected repayment in the next few years.

**Figure 9: Expected maturity profile of long-term financial liabilities (EUR m)**



Source: Pannonia Bio, Scope

**Figure 10: Liquidity**



Source: Pannonia Bio, Scope

**Back-end-loaded maturity profile**

The company's maturity profile is largely balanced. Bank loans are amortised quarterly over 7.5 years. The bond issued under the Hungarian National Bank's Bond Funding for Growth Scheme has a tenor of 10 years. Bank and shareholder loans are denominated in euros, while the bond is in Hungarian forint.



**Adequate liquidity**

Liquidity remains adequate. For 2021-22, we expect coverage of short-term financial debt at more than 1x, including from an undrawn working capital facility of EUR 35m and available cash and cash equivalents of EUR 32m as of 31 May 2021.

**Neutral financial policy**

Pannonia Bio's financial policy is neutral for the issuer rating. The maximisation of its return on invested capital through capex and dividend payments goes hand in hand with the sustainability of the company's business model. Substantial cash outflows are further limited by covenants set by the bank loan agreement.

**No impact from shareholder structure**

Our assessment of the group structure indicates no impact (either negative or positive) from potential parent support.

**Excellent recovery expectations for senior secured debt**

Our recovery analysis indicates an 'excellent recovery' for senior secured debt. These expectations translate into a BBB for this debt category.

**Average recovery expectations for senior unsecured debt**

With the refinancing of bank term loans and in the absence of bond issuance plans, our recovery analysis indicates an 'average' recovery for senior unsecured debt, including the HUF 15bn bond (ISIN: HU0000359112) issued under the Hungarian National Bank's scheme. The recovery is based on an expected distressed enterprise value as a going concern in a hypothetical default scenario in 2023. These expectations translate into a BB+ for this debt category. While the company's capex programme will be financed predominantly by higher senior secured debt (bank loans) this reduces recovery prospects for senior unsecured debt which ranks behind in a default case, explaining the downgrade on this debt category.

**Supplementary rating drivers**

**Senior secured debt: BBB**

**Senior unsecured debt: BB+**





## Scope Ratings GmbH

### Headquarters Berlin

Lennéstraße 5  
D-10785 Berlin

Phone +49 30 27891-0

### Oslo

Karenslyst allé 53  
N-0279 Oslo

Phone +47 21 62 31 42

### Frankfurt am Main

Neue Mainzer Straße 66-68  
D-60311 Frankfurt am Main

Phone +49 69 66 77 389 0

### Madrid

Edificio Torre Europa  
Paseo de la Castellana 95  
E-28046 Madrid

Phone +34 914 186 973

### Paris

23 Boulevard des Capucines  
F-75002 Paris

Phone +33 1 8288 5557

### Milan

Via Nino Bixio, 31  
20129 Milano MI

Phone +39 02 30315 814

## Scope Ratings UK Limited

### London

111 Buckingham Palace Road  
London SW1W 0SR

Phone +44 020 7340 6347

[info@scoperatings.com](mailto:info@scoperatings.com)

[www.scoperatings.com](http://www.scoperatings.com)

## Disclaimer

© 2021 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Ratings UK Limited, Scope Analysis GmbH, Scope Investor Services GmbH, and Scope ESG Analysis GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided 'as is' without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or other damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party as, opinions on relative credit risk and not a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5 D-10785 Berlin.