

CREDIT OPINION

20 June 2024

Update

Send Your Feedback

RATINGS

Essity Aktiebolag

Domicile	STOCKHOLM, Sweden
Long Term Rating	Baa1
Туре	LT Issuer Rating - Fgn Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Giuliana Cirrincione	+39.02.9148.1126
Analyst	
giuliana.cirrincione@moc	odys.com
Simone Zampa	+39.02.9148.1989
Senior Vice President/Mar	nager

simone.zampa@moodys.com

Nour Ghachem +39.291.481.980 Ratings Associate nour.ghachem@moodys.com

Essity Aktiebolag

Update to credit analysis

Summary

Essity Aktiebolag's Baa1/P-2 ratings with a stable outlook primarily reflect its large scale and broad product portfolio; its leading market positions globally, with well-recognised brands and a good track record of innovation; its global footprint, with the faster-growing emerging markets representing around one-fourth of its revenue; the fairly good underlying growth of and stable demand for its products; its prudent financial policy, aimed at protecting its solid investment-grade rating; and its track record of positive free cash flow (FCF) and the additional financial flexibility granted by the proceeds from the recent divestment of its subsidiary Vinda, which will support debt reduction and funding of future tuck-in acquisitions.

Essity's ratings are primarily constrained by its exposure to volatile input costs, pulp in particular, which can be passed through only with a delay; its somewhat below-average profitability compared with that of most of its peers we rate similarly, such as <u>Kimberly-Clark</u> <u>Corporation</u> (K-C, A2 stable) and <u>The Procter & Gamble Company</u> (P&G, Aa3 stable); and a certain degree of debt-funded M&A risk, which, however, is mitigated by the company's commitment to maintaining a solid investment-grade rating and its temporarily much higher-than-average cash balance as a result of recent sale proceeds (see Exhibit 1).

Exhibit 1

We expect adjusted leverage to improve further in 2024 as proceeds from the sale of Vinda are applied to debt repayment

Moody's adjusted gross debt and leverage ratio



All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. The forward view represents Moody's Ratings view and does not incorporate any significant divestments and acquisitions.

Source: Moody's Ratings

Credit strengths

- » Strong business profile, with a broad portfolio of well-positioned global (Tork and Tena) and regional brands
- » Fairly good underlying growth of and stable demand for most of its products
- » A financial policy that is aimed at protecting its solid investment-grade rating
- » Additional financial flexibility granted by proceeds from the recent disposal of Vinda, which will support debt reduction and M&A funding

Credit challenges

- » Exposure to volatile input costs, such as pulp and recycled paper
- » Event risks, such as shareholder-friendly actions or debt-funded M&A
- » Still-difficult economic and operating environment increases risk of private-label competition

Rating outlook

Essity is currently strongly positioned in its rating category, reflected by its stronger balance sheet following the recent disposal of Vinda, which resulted in cash proceeds of around SEK19 billion. However, the stable rating outlook reflects our expectation that, alongside debt reduction, Essity will also apply a significant portion of these proceeds to increase shareholder distributions and M&A activity when it regains momentum. The stable outlook also assumes that Essity will maintain a prudent financial policy commensurate with the current rating, with credit metrics likely to improve moderately over the next 12-18 months.

Factors that could lead to an upgrade

- » EBIT margin consistently above 12% in the company's business areas
- » Retained cash flow/net debt consistently above 25%
- » Moody's-adjusted debt/EBITDA well below 2.5x on a sustained basis
- » Continued strong FCF generation

Factors that could lead to a downgrade

- » EBIT margin below 9%
- » Retained cash flow/net debt below 20% on a sustained basis
- » Moody's-adjusted debt/EBITDA above 3.0x
- » Negative FCF
- » Erosion of the company's solid liquidity

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2 Essity Aktiebolag [1][2]

	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	LTM Mar-24	Dec-2024(F)
Revenue (SEK billion)	129.0	121.8	121.9	131.3	147.1	145.6	145.7
Revenue (USD billion)	\$13.7	\$13.3	\$14.2	\$12.5	\$14.0	\$13.8	\$13.8
EBIT margin %	11.4%	13.7%	10.4%	8.0%	10.9%	11.0%	11.1%
EBITA Margin %	12.2%	14.7%	11.3%	9.2%	12.1%	12.3%	12.3%
Debt / EBITDA	2.5x	2.1x	3.0x	4.1x	2.8x	2.2x	1.9x
RCF/Net Debt	22.0%	29.6%	19.4%	16.3%	23.3%	21.9% [4]	39.4%
FCF / Debt	14.9%	10.9%	1.9%	2.1%	12.7%	7.9% [5]	11.3%
EBITA / Interest Expense	10.2x	15.2x	15.4x	8.2x	6.6x	6.7x	7.9×

[1] All figures and ratios are calculated using Moody's Ratings estimates and standard adjustments. [2] Periods are financial year-end unless indicated. LTM = Last 12 months. [3] This represents Moody's Ratings forward view, not the view of the issuer and, unless noted in the text, does not incorporate significant acquisitions and divestitures. [4] 33.4% adjusted for dividend payment in April 2023. [5] 17.4% adjusted for dividend payment in April 2023. *Source: Moody's Ratings*

Profile

Headquartered in Stockholm, Sweden, Essity Aktiebolag is one of the leading global hygiene and health companies, with sales of SEK147 billion in 2023. The company develops, produces and sells a wide range of products, including incontinence products, baby diapers, feminine care products, consumer tissue, away-from-home tissue, and products for wound care, compression therapy and orthopaedics. Essity operates across 150 countries worldwide under several well-recognised brands including Tena and Tork. It was formed in 2016 and spun off in June 2017 from Svenska Cellulosa Aktiebolaget. The company is listed on the Stockholm Stock Exchange, and had a market capitalisation of around SEK191.3 billion as of 17 June 2024.

Exhibit 3

Consumer tissue accounts for the largest portion of sales Revenue breakdown by product, 2023



Exhibit 4 Emerging markets represent roughly 25% of sales Revenue breakdown by geography, 2023



Source: Company

Detailed credit considerations

Profit margins will continue to improve, but at a slower pace, driven by expansion into higher-margin or fastest-growing categories, as well as deflation and cost savings

Source: Company

In March 2024, Essity completed the sale of its 52% stake in the Chinese consumer tissue company Vinda, which resulted in cash proceeds of around SEK19 billion. The disposal marked a milestone in the company's strategy to reduce its high exposure to the consumer tissue business, whose share of sales in 2023 decreased to 33% from 41% before the divestment. Although consumer tissue remains the largest category in Essity's product portfolio, the disposal of Vinda will have a positive impact by increasing its profit margins and decreasing earnings volatility. Concurrently, the company will continue its effort to expand its portfolio to include a

growing share of more margin-accretive categories. We expect that a part of the proceeds from the divestment of Vinda will be used to fund value-accretive investments and acquisitions in the higher-margin Health & Medical and Professional Hygiene segments, or in the fastest-growing categories within Consumer Goods, including in emerging markets. Per the new medium-term financial targets announced in mid-June this year, the company aims to achieve, on average, an annual organic growth rate of more than 3% (from 2% previously, excluding Vinda) and a company-adjusted EBITA margin — that is, excluding items affecting comparability — of more than 15% (from 14% previously, excluding Vinda).

Within the current perimeter, profitability improved already in 2023 as a result of the savings achieved from the optimisation measures in the Professional Hygiene and Health & Medical divisions, while Consumer Goods benefited from strong volume growth in incontinence products and feminine care, as well as from growing prices and stable operating margins in the European tissue business. In 2024, we expect muted top-line growth, or a small decline in revenue, which will reflect our view that the strategic contract exits done in 2023 in Health & Medical and Professional Hygiene continue to result in somewhat lower volumes in the first part of 2024. We also expect no revenue contribution from M&A in the year. However, according to our forecasts, Essity's EBITDA (on a Moody's-adjusted basis) will increase to around SEK25 billion in 2024, from SEK24 billion in 2023, as a result of improved product mix across all business divisions. In addition, continued cost savings and still-moderating raw material and energy costs will more than offset the impact of selected downward price adjustments and wage inflation.

Exposure to emerging markets is an additional growth driver for Essity. With a share of around 25% of its sales in 2023, Essity has a significant presence in emerging markets. We expect the company to further increase this exposure over the next years, both organically and through M&A, to secure long-term growth potential. Essity's products benefit from an overall stable demand that is recurring in nature and supported by strong underlying market fundamentals. In addition to the increasing share of people with chronic diseases, population growth and higher disposable income are key growth drivers in emerging markets, where per capita consumption of personal hygiene and health and medical products is significantly lower than that in mature markets.

Prudent financial policies point to firm commitment to a solid investment-grade rating but M&A activity will regain momentum, supported by ample cash balance

Essity's financial policies are centred around its commitment to retain a solid investment-grade rating, which drives its capital allocation priorities, including shareholder distributions and M&A strategy.

Following the divestment of Vinda, Essity's reported cash balance as of 31 March 2024 was unusually high at SEK11.4 billion, compared with an average of SEK4 billion over 2018-2023. In addition, the company has recently announced that it will start a share buyback programme as a recurring part of its capital allocation. The current programme, which amounts to SEK3 billion, will run through the next annual general meeting in March 2025, while the company does not envisage any change in its dividend policy. Because of the sizeable amount of excess cash, the decision to increase the remuneration to shareholders is commensurate with the company's traditionally prudent financial policy.

Essity has already applied a portion of the Vinda proceeds to reduce its debt, leading to a marked decline in its Moody's-adjusted gross debt/EBITDA to around 2.2x in the 12 months that ended March 2024. In addition, because of continued but moderate EBITDA growth and consistently positive FCF, we forecast Essity's Moody's-adjusted leverage will decline further to around 2x by year-end 2024, which strongly positions the company in its current rating category.

M&A remains an essential part of Essity's strategy, as a key driver to complement organic growth with selected acquisitions in highermargin segments or in the fastest-growing product categories within the existing portfolio. As a result, we expect acquisition spending to pick up again strongly as soon as the company's M&A pipeline regains momentum. Although we do not have visibility into the timing or the likely size of future acquisitions, we assume that the company will manage its M&A strategy within the limits of the additional financial flexibility granted by its temporarily high cash balance and FCF.

Essity has a long track record of targeted tuck-in acquisitions. These included, for example, the increase in its stake in Asaleo Care Ltd. and Productos Familia S.A. in 2021; the acquisition of an 80% stake in Knix Wear Inc., a Canadian provider of leakproof apparel for menstrual periods and incontinence in 2022; and the acquisition of Modibodi, a leading leakproof apparel company in Australia, New Zealand and the UK, which made Essity the global market leader in leakproof apparel. This targeted M&A strategy will help narrow

the profitability gap with Essity's more profitable competitors, especially K-C and P&G, which benefit from a higher share of the more profitable personal care business and the generally more profitable US market.

Leading market positions globally, underpinned by strong brands and a wide product portfolio

Essity is one of the leading global hygiene and health companies, with a strong market position in the branded product segments where it is present across around 150 countries, and track record of innovative product launches. The company is the global leader in incontinence products under the Tena brand and in professional hygiene under the Tork brand. In addition, the company has strong market positions globally within the markets for consumer tissue (third position) as well as baby diapers and feminine care (fifth position), where it sells its products under both global and regional brands. Essity is also the second-largest global player in the medical solutions market — which includes wound care, compression therapy and orthopaedics products — with brands such as Jobst and Leukoplast.

The Consumer Goods and Health and Medical businesses are fairly competitive and subject to periods of temporary oversupply, which require producers to continuously focus on innovation to protect brand strength and optimise costs. Although the market for low-technology medical devices, such as wound care and compression therapy, benefits from robust demand and above-average profitability, the tissue business is more competitive and less profitable because products are generally more commoditised. In the tissue business, Essity competes primarily with <u>Georgia-Pacific LLC</u> (A3 stable), Hengan International Group Company Limited, K-C and Sofidel S.p.A. In the Health and Medical business, Essity's key competitors are K-C, P&G and Unicharm Corporation.

Exhibit 5





All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Ratings

Profitability exposed to volatile input costs

The demand for Essity's products, and its profitability, has historically been fairly stable through the cycle, even during severe global economic downturns. Its Moody's-adjusted EBIT margins have been around 11% on average over the last six years, including also the temporary but significant drop to 8% reported in 2022, when profit margins were hurt by inflationary pressures as raw material, energy and distribution costs increased significantly, and were not fully offset by higher volumes and selling prices.

Some of the company's input costs, such as pulp (29% of total raw materials and consumables, and 11% of total operating expenses in 2023) and recovered paper (11% of total raw materials and consumables, and around 4% of total operating expenses), have high volatility, and price increases can be typically passed on to customers only with a delay, which could be up to one year in the case of institutional customers. Positively, following the disposal of Vinda, the company's has reduced its exposure to pulp by almost 50% in terms of volumes. Although the exposure to highly volatile commodity prices is a credit constraint, the company has been able to manage its key input costs over the past years while protecting its profitability levels amid sometimes extreme fluctuations.





Sources: Company and former Svenska Cellulosa Aktiebolaget segmental reporting

ESG considerations

Essity Aktiebolag's ESG credit impact score is CIS-2

Exhibit 7 ESG credit impact score



Source: Moody's Ratings

Essity's **CIS-2** indicates that ESG considerations are not material to the rating primarily due to a conservative financial policy, aimed at protecting its solid investment-grade rating.



Source: Moody's Ratings

Environmental

Essity's **E-3** reflects the company's exposure to natural capital and waste and pollution risks. Natural capital risk reflects the use of pulp in the production process in line with industry peers. Essity's exposure to waste & pollution stems from the release of air pollutants and hazardous waste.

Social

Essity's **S-3** IPS mirrors the industry-wide exposure to risks related to health & safety, responsible production and demographic and societal trends. The company's risk related to customer relations is low given that the majority of revenue is generated with retail chains. Also, sourcing of employees is not considered to be an issue for Essity.

Governance

Essity's **G-2** balances risk related to board structure and policies given it has A and B shares with different voting rights and a concentrated ownership against a conservative financial policy, aimed at protecting its solid investment-grade rating.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <u>here</u> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Liquidity analysis

Set aside the cash proceeds from the recent divestment of Vinda, Essity's liquidity has traditionally been good, primarily based on our expectation of consistently positive FCF. As of the end of March 2024, the company reported cash and cash equivalents of around SEK11.4 billion, of which around SEK 2.3 billion was in countries with currency restrictions. This level of cash is unusually high, compared with the company's traditional liquidity target of 3%-4% of sales, and reflects the cash proceeds of around SEK19 billion from the disposal of Vinda completed in March 2024. In addition, the company had access to various largely undrawn credit facilities, totalling roughly SEK66.3 billion. The facilities are of high quality, without significant adverse change clauses and other conditionality language, and have also served as backstop facilities for the company's commercial paper programme, which has been a central source of its short-term funding needs. As of the end of March 2024, the company reported short-term debt of around SEK14.8 billion, which includes SEK3.4 billion under its commercial paper programme. The company's maturity profile is generally well spread, with an average maturity of around 4 years.

In February 2024, the company negotiated an additional €4 billion one-year revolving credit facility (RCF), whose maturity can be extended up to June 2026 and which was put in place as a contingency line in case of any bondholders acceleration notice requests on the outstanding 2029-2031 bonds following the disposal of Vinda. This represents a contingent risk for Essity and so far defensive measures have been put in place by the company in case the risk was to cristalise.

Exhibit 9 Essity's debt maturity profile is generally well spread As of 31 March 2024



The \leq 4 billion RCF is not included in the maturity profile and is expected to remain undrawn. Source: Essity reporting

Methodology and scorecard

We used our Consumer Packaged Goods rating methodology to rate Essity. The scorecard-indicated outcome for our forward view is A3, compared to the Baa1 rating assigned. The notch differential reflects the impact of the additional financial flexibility granted by the cash proceeds from the recent disposal of Vinda, resulting in a marked improvement in credit metrics whose sustainability over time still has to be tested.

Exhibit 10 **Rating factors**

Consumer Packaged Goods Industry Scorecard [1][2]	Curre LTM 3/31		Moody's 12-18 Month Forward View As of 6/17/2024 [3]		
Factor 1 : Scale (20%)	Measure	Score	Measure	Score	
a) Revenue (USD Billion)	\$13.8	Α	\$13.8 - \$14.3	А	
Factor 2 : Business Profile (30%)					
a) Geographic Diversification	A	A	A	А	
b) Segmental Diversification	Baa	Baa	Baa	Baa	
c) Market Position	A	A	A	А	
d) Category Assessment	A	Α	A	А	
Factor 3 : Profitability (10%)					
a) EBITA Margin	12.3%	В	12.3% - 12.5%	В	
Factor 4 : Leverage and Coverage (25%)					
a) Debt / EBITDA	2.2x	Α	1.8x - 2x	А	
b) RCF / Net Debt	21.9%	Baa	30% - 31%	Baa	
c) EBITA / Interest Expense	6.7x	Baa	8x - 9.6x	А	
Factor 5 : Financial Policy (15%)					
a) Financial Policy	A	A	A	А	
Rating:					
a) Scorecard-Indicated Outcome		Baa1		A3	
b) Actual Rating Assigned		·		Baa1	

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of the 12 months that ended on 31 March 2024.

[3] This represents Moody's Ratings forward view, not the view of the issuer, and does not incorporate significant acquisitions and divestitures. Source: Moody's Ratings

Ratings

Exhibit 11

Category	Moody's Rating
ESSITY AKTIEBOLAG	
Outlook	Stable
Issuer Rating	Baa1
Senior Unsecured	Baa1
ST Issuer Rating	P-2
ESSITY CAPITAL B.V.	
Outlook	Stable
Bkd Senior Unsecured -Dom Curr	Baa1
Source: Moody's Ratings	

Source: Moody's Ratings

Appendix

Exhibit 12

Peer comparison

		ity Aktiebolag Baa1 stable			Procter & Gamble Company (The) Aa3 stable			Kimberly-Clark Corporation A2 stable		
(in US millions)	FYE Dec-22	FYE Dec-23	LTM Mar-24	FYE Dec-22	FYE Dec-23	LTM Mar-24	FYE Dec-22	FYE Dec-23	LTM Mar-24	
Revenue	\$12,475	\$13,979	\$13,836	\$80,187	\$82,006	\$84,060	\$20,175	\$20,431	\$20,385	
EBITDA	\$1,674	\$2,284	\$2,321	\$21,394	\$22,055	\$24,513	\$3,690	\$4,135	\$4,220	
Total Debt	\$6,932	\$6,438	\$5,083	\$32,156	\$33,510	\$32,833	\$8,931	\$8,624	\$8,605	
Cash & Cash Equivalents	\$184	\$441	\$863	\$7,214	\$8,246	\$6,828	\$427	\$1,093	\$853	
EBIT margin %	8.0%	10.9%	11.0%	22.9%	23.3%	25.5%	13.9%	15.9%	16.4%	
EBIT / Interest Expense	7.0x	5.9x	6.0x	30.8x	20.3x	19.0x	9.3x	10.2x	10.7x	
Debt / EBITDA	4.1x	2.8x	2.2x	1.7x	1.8x	1.5x	2.5x	2.1x	2.0x	
RCF / Net Debt	16.3%	23.3%	21.9%	30.1%	27.2%	35.1%	13.7%	18.7%	19.4%	
FFO / Debt	22.6%	29.3%	37.9%	47.7%	44.0%	53.3%	30.9%	35.2%	36.4%	

All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Ratings

Exhibit 13

Reconciliation of debt

Essity	AKLIEDOLAg

in SEK million)	FYE	FYE	FYE	FYE	FYE	LTM
(in SEK million)	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Mar-24
As Reported Total Debt	51,227	46,096	56,895	71,515	60,984	52,237
Pensions	4133	4207	2500	1453	1273	1273
Leases	0	0	0	0	0	0
Non-Standard Adjustments	-461	0	0	0	5,508	0
Moody's Adjusted Total Debt	54,899	50,303	59,395	72,968	67,765	53,510

Source: Moody's Ratings

Exhibit 14

Reconciliation of EBITDA

Essity Aktiebolag

	FYE	FYE	FYE	FYE	FYE	LTM
(in SEK million)	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Mar-24
As Reported EBITDA	21,941	24,517	20,689	17,562	23,407	23,803
Pensions	21	-155	24	56	106	106
Leases	0	0	0	0	0	0
Unusual Items	160	0	-706	0	525	525
Moody's Adjusted EBITDA	22,122	24,362	20,007	17,618	24,038	24,434

Source: Moody's Financial Metrics™

Exhibit 15 Overview of key metrics Essity Aktiebolag

	FYE	FYE	FYE	FYE	FYE	LTM
(in SEK million)	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Mar-24
INCOME STATEMENT						
Revenue	128,975	121,752	121,867	131,320	147,147	145,645
EBITDA	22,122	24,362	20,007	17,618	24,038	24,434
EBITA	15,756	17,885	13,792	12,142	17,832	17,987
EBIT	14,645	16,691	12,616	10,475	16,040	16,089
Interest Expense	1,554	1,179	896	1,487	2,709	2,690
BALANCE SHEET						
Cash & Cash Equivalents	2,236	3,699	2,508	1,937	4,638	9,084
Total Debt	54,899	50,303	59,395	72,968	67,765	53,510
Net Debt	52,663	46,604	56,887	71,031	63,127	44,426
CASH FLOW						
Funds from Operations (FFO)	15,937	18,617	16,365	16,517	19,829	20,287
Cash Flow From Operations (CFO)	19,312	17,800	14,616	12,874	21,596	22,766
Dividends	4,374	4,813	5,312	4,937	5,094	10,536
Retained Cash Flow (RCF)	11,563	13,804	11,053	11,580	14,735	9,751
RCF / Net Debt	22.0%	29.6%	19.4%	16.3%	23.3%	21.9%
Free Cash Flow (FCF)	8,192	5,483	1,102	1,503	8,625	4,208
FCF / Debt	14.9%	10.9%	1.9%	2.1%	12.7%	7.9%
PROFITABILITY						
% Change in Sales (YoY)	8.8%	-5.6%	0.1%	7.8%	12.1%	-1.0%
EBIT margin %	11.4%	13.7%	10.4%	8.0%	10.9%	11.0%
EBITA margin %	12.2%	14.7%	11.3%	9.2%	12.1%	12.3%
EBITDA margin %	17.2%	20.0%	16.4%	13.4%	16.3%	16.8%
INTEREST COVERAGE						
EBIT / Interest Expense	9.4x	14.2x	14.1x	7.0x	5.9x	6.0x
EBITDA / Interest Expense	14.2x	20.7x	22.3x	11.8x	8.9x	9.1x
(EBITDA - CAPEX) / Interest Expense	4.5x	5.5x	6.5x	7.5x	8.5x	9.5x
LEVERAGE						
Debt / EBITDA	2.5x	2.1x	3.0x	4.1x	2.8x	2.2x
Debt / (EBITDA - CAPEX)	3.5x	4.5x	5.5x	6.5x	7.5x	8.5x
Net Debt / EBITDA	2.4x	1.9x	2.8x	4.0x	2.6x	1.8x

All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Ratings

© 2024 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials. To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any use highermatican equipe indirect.

such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V, I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Calificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesse", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulators. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER 1411526