

CREDIT OPINION

15 December 2025

Update



RATINGS

Cheplapharm Arzneimittel GmbH

Domicile	Germany
Long Term Rating	B3
Туре	LT Corporate Family Ratings
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

Gilberto Ramos, CFA +33.1.5330.3370 AVP-Analyst gilberto.ramos@moodys.com

Naoufal El Alaoui +33.1.5330.5984 Sr Ratings Associate

mohammed.elalaoui@moodys.com

Victoria Maisuradze +33.1.5330.5974

Associate Managing Director
victoria.maisuradze@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Cheplapharm Arzneimittel GmbH

Update to credit analysis

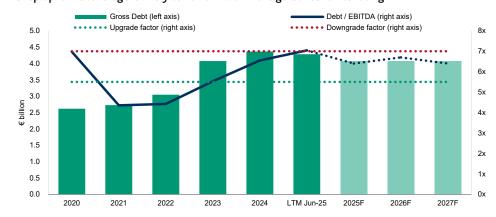
Summary

<u>Cheplapharm Arzneimittel GmbH</u>'s (Cheplapharm) B3 corporate family rating (CFR) is supported by the company's good therapeutic and geographical diversification; strong cash flow generation, supported by its asset-light business model; and adequate liquidity.

At the same time, the B3 rating is constrained by the structural earnings decline in Cheplapharm's existing off-patent branded product portfolio, prompting it to make product acquisitions to maintain or grow revenue; the execution risks associated with the integration of its acquisitions, specifically industrial transfers; and its aggressive financial policy, with multiple debt-funded acquisitions in recent years.

Cheplapharm has faced operational challenges including limited product availability on key products, delayed integration of acquisitions, and negative market shifts impacting materially profitability and leverage. The company's operations and financial performance are stabilising due to its transformation programme, which focuses on supply chain, commercial and integration, as well as working capital improvements.

Exhibit 1
Cheplapham's leverage is likely to remain within the guidance for its rating



All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Rated entity - Cheplapharm Arzneimittel GmbH, financials under entity Cheplapharm SE. Moody's forecasts are Moody's opinion and do not represent the views of the issuer. Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

Credit strengths

- » Good therapeutic and geographical diversification
- » Strong cash flow generation, supported by the company's asset-light business model
- » Adequate liquidity, supported by strong cash flow

Credit challenges

» Wide operational issues on supply chain and integration, which the company continues to address to stabilise operations

- » Structural earnings decline in its existing off-patent branded product portfolio, which prompts the company to make product acquisitions
- » Execution risks associated with the integration of acquisitions, specifically industrial transfers
- » Aggressive financial policy, with multiple debt-funded acquisitions that have substantially increased gross debt in recent years

Rating outlook

The stable outlook on Cheplapharm's rating reflects our expectation that the company will be able to stabilise its operating performance over the next 12-18 months, while its credit metrics will remain in line with a B3 rating. The stable outlook also factors in our expectation of the company sustaining adequate liquidity.

Factors that could lead to an upgrade

We could upgrade Cheplapharm's rating if the company successfully addresses its operational difficulties and stabilises its business, thereby returning to its historical revenue trends, specifically achieving an organic revenue decline of 3%-5% per year. Quantitatively, we would upgrade the rating if Cheplapharm maintains its Moody's-adjusted debt/EBITDA below 5.5x and cash flow from operations (CFO)/debt above 10% on a sustained basis. An upgrade would also require the company to demonstrate a more cautious acquisition strategy.

Factors that could lead to a downgrade

Conversely, we could downgrade Cheplapharm's rating if the company fails to address its operational difficulties and its revenue continues to decline at higher rates than that in the past. Quantitatively, we could downgrade Cheplapharm's rating if it fails to maintain its Moody's-adjusted debt/EBITDA comfortably below 7.0x or its CFO/debt remains below 5% on a sustained basis. A failure to maintain adequate liquidity, including a well-spread debt maturity profile and timely refinancing of upcoming maturities, or a significant deterioration in interest coverage metrics could also lead to negative pressure on the rating.

Key indicators

Exhibit 2
Cheplapharm Arzneimittel GmbH

(in € billions)	2020	2021	2022	2023	2024	LTM Jun-25	2025F	2026F	2027F
Revenue	0.6	1.1	1.3	1.5	1.5	1.5	1.6	1.5	1.5
Debt / EBITDA	7.0x	4.4x	4.4x	5.5x	6.5x	7.0x	6.4x	6.7x	6.4x
RCF / Net Debt	10.2%	16.6%	16.2%	15.2%	9.0%	8.1%	8.2%	9.5%	11.7%
EBIT / Interest Expense	1.9x	2.2x	1.5x	1.1x	0.3x	0.0x	0.1x	0.1x	0.2x
EBITDA Margin	58.7%	57.9%	53.8%	49.1%	43.4%	39.5%	40.8%	40.8%	42.0%
EBITA / Interest Expense	4.3x	4.6x	3.4x	3.1x	2.4x	2.2x	2.1x	2.1x	2.1x
FCF (before acq. of intangibles) / Debt	8.3%	10.7%	14.4%	8.4%	3.7%	4.3%	5.2%	8.9%	10.2%
FCF (after acq. of intangibles) / Debt	-35.9%	-7.9%	-5.2%	-28.5%	-12.6%	-5.5%	3.5%	8.6%	9.8%
									-

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Rated entity - Cheplapharm Arzneimittel GmbH, financials under entity Cheplapharm SE.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

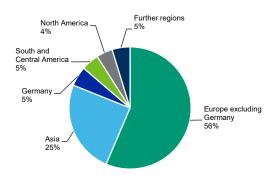
Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

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.

Profile

Based in Greifswald, Germany, Cheplapharm is a family-owned pharmaceutical company specialising in the marketing of off-patent, branded legacy and niche medications. The group's asset-light business model centres on acquiring products with attractive earnings prospects and outsourcing production and distribution to established third parties, allowing for robust cash flow generation and ongoing reinvestment in new acquisitions to mitigate structural declines in its existing portfolio. Cheplapharm manages a portfolio of more than 150 products distributed across over 145 countries, and as of the 12 months that ended September 2025, it reported revenue of €1,588 million and company-adjusted EBITDA of €693 million. Ownership of the company is equally split between co-CEO Sebastian Braun and Chief Scientific Officer Bianca Juha, siblings who assumed ownership in 2003.

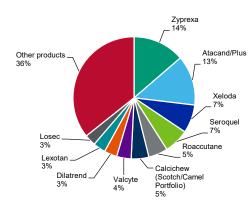
Exhibit 3
Revenue breakdown by geography (LTM September 2025)



LTM = Last 12 months.

Source: Company data

Exhibit 4
Company's commercial EBITDA breakdown by product (LTM September 2025)



LTM = Last 12 months.

Source: Company data

Detailed credit considerations

Operational transformation has led to performance stabilisation

Cheplapharm's transformation programme is focused on addressing operational inefficiencies that have weighed on profitability and leverage. Key initiatives include restructuring supply chains, optimising commercial models and integrating previous acquisitions. Zyprexa, a major portfolio asset, has faced significant challenges: the oral formulation has been impacted by delayed technology transfers and regulatory bottlenecks, while the injectable version has suffered from supply disruptions and limited manufacturing capacity. Stabilisation measures, such as dual sourcing, bridging stock and accelerated tech transfer processes, are underway, and the company expects both the oral and injectables formulations of Zyprexa to regain normal supply levels around the first half of 2026. These operational improvements are critical for restoring EBITDA margins and preserving market share on this key product, especially the more profitable injectable solution, which may face competition in the US from next year.

Working capital optimisation remains a priority for management, as inventory build-up from recent acquisitions and safety stock strategies have inflated capital requirements. The programme targets working capital improvements through enhanced sales and operations planning processes, renegotiated supplier terms and active inventory management. These measures should support liquidity and improve cash conversion, but execution risk is important given the complexity of global supply chains and exposure to regulatory constraints. From a credit perspective, successful delivery is essential to offset high leverage, particularly as the company completes its supply-chain optimisation. Failure to achieve these objectives could prolong margin compression and delay leverage reduction, heightening refinancing risk of upcoming debt maturities.

Credit metrics to remain stable over the next 12-18 months

Over the next 12-18 months, we expect Cheplapharm's Moody's-adjusted EBITDA to remain relatively flat at around €610 million-€615 million, compared with our estimate of €624 million in 2025. Main drivers will continue to be the benefits from the operational transformation programme, which should support earnings stabilisation despite the ongoing decline in earnings from its mature drug

3

portfolio. Under our current forecasts, we expect the company's Moody's-adjusted gross leverage to be about 6.4x in 2025 and remain around those levels over the next 12-18 months. Moreover, over the same period, we expect continued robust Moody's-adjusted free cash flow (FCF) generation before acquisitions of about €390 million. Over the next 12-18 months, we expect its Moody's-adjusted CFO/debt to be around 10%, compared with 6% in 2025.

We expect Cheplapharm to resume its M&A strategy once its transformational programme is on its final stages, potentially starting on the second half of 2026, and pursue drug portfolio acquisitions, as these actions are integral to its strategy. The company generally acquires drugs at revenue multiples of 2x-4x and targets acquisitions with a maximum return on investment period of 6.5 years. At this stage, we expect the company to pursue more bolt-on acquisitions rather than large debt-funded transactions.

Cheplapharm's business model involves frequent acquisitions to maintain growth; high profitability supports solid operating cash flow

Cheplapharm operates an asset-light business model, focusing on acquiring intellectual property rights for legacy and niche branded off-patent products from large multinational pharmaceutical companies. The company outsources manufacturing and distribution, which enables it to minimise costs and generate robust cash flow, reflected in its high EBITDA margins. However, this approach exposes Cheplapharm to transition risks, as delays in transferring marketing authorisations and industrial operations could prevent the company from achieving its projected earnings, although it would still receive a share of the seller's profit under transitional service agreements.

Credit risk is influenced by modest organic sales erosion in parts of Cheplapharm's off-patent portfolio. However, the company mitigates this through active portfolio management, including selective acquisitions, while recent performance has stabilised revenue. Although the company's lean cost structure and avoidance of R&D expenses support healthy FCF before acquisitions, its need for continuous external growth introduces potential volatility in cash generation and leverage metrics. Unexpected disruptions in supply or delays in asset transfers could further strain earnings and liquidity, making the company's ability to execute its acquisition strategy a key credit consideration.

Although Cheplapharm's model is not unique within the specialty pharmaceutical industry — similar strategies are employed by peers such as <u>ADVANZ PHARMA Holdco Limited</u> (B2 negative) and <u>Pharmanovia Bidco Limited</u> (Caa1 stable) — the company's aggressive acquisitive strategy presents additional credit challenges. The concentration in legacy branded off-patent products, while generally enjoying strong market acceptance and predictable sales erosion, also limits organic growth prospects. The company's credit profile depends on its capacity to manage acquisition-related risks, maintain operational efficiency and navigate potential disruptions during product transfers.

Good therapeutic and geographical diversification, with modest product concentration

Cheplapharm operates across diverse therapeutic areas, primarily in cardiology and mental and sleeping disorders, with moderate product concentration risk. As of the 12 months that ended September 2025, its top two franchises, Zyprexa and Atacand, accounted for 14% and 13% of its commercial EBITDA, respectively. The company's revenue is geographically diversified, with Europe representing 61% of its total revenue, although this share has been declining. On a per product, per country basis, revenue concentration is typically below 5%, which supports credit stability.

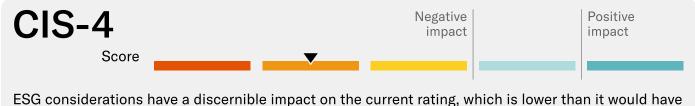
Key credit risks for Cheplapharm include the potential for accelerated earnings declines from newly acquired drugs, particularly because of delisting or increased generic competition, which can vary by country. The company's broad geographical presence within Europe is a mitigating factor. Cheplapharm's business model relies on maintaining the confidence of major pharmaceutical firms to facilitate future acquisitions; however, persistent operational difficulties could damage its reputation and restrict access to new products. Dual-sourcing is assessed on a case-by-case basis and implemented where economically justified. Overall, the company's diversified revenue streams and operational flexibility are credit positives, though ongoing risks could impact its relationship with drug sellers.

ESG considerations

Cheplapharm Arzneimittel GmbH's ESG credit impact score is CIS-4

Exhibit 5

ESG credit impact score

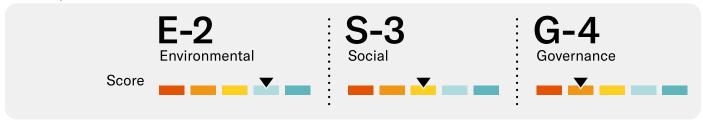


been if ESG risks did not exist. The negative impact of ESG considerations on the rating is higher than for an issuer scored CIS-3.

Source: Moody's Ratings

CIS-4. Cheplapharm's score indicates the rating is lower than it would have been if ESG risk exposures did not exist. This mostly reflects governance-related risks from the company's rapid growth through debt-funded acquisitions which has resulted in some operational challenges and elevated leverage.

Exhibit 6
ESG issuer profile scores



Source: Moody's Ratings

Environmental

E-2. Cheplapharm's score reflects the low environmental exposures of the pharmaceutical industry, with no significant environmental exposures that are materially different than the industry norm.

Social

S-3. Cheplapharm's score reflects industry-wide risk exposures related to litigation, pricing and high manufacturing compliance standards, but the company's diversified product portfolio which essentially comprises off-patent drugs that have been on the market for many years mitigates the risk of product safety issues and of abrupt price declines from regulatory changes.

Governance

G-4. Cheplapharm's score reflects financial policies with a tolerance for leverage, and a track record of rapid growth through acquisitions, which has resulted in a sharp increase in debt in recent years. Recent widespread operational challenges have stemmed from the company's aggressive M&A strategy, which has strained organisational and management resources, leading to challenges and bottlenecks in integration of recent acquisitions. The **G-4** score also considers the concentrated ownership of the company.

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 here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

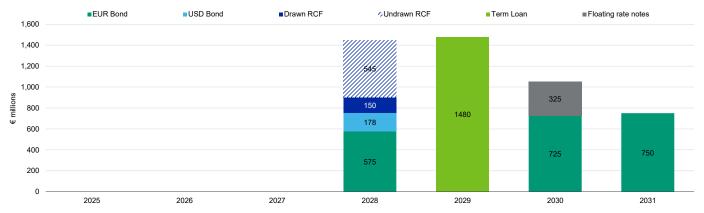
Liquidity analysis

Cheplapharm's liquidity is adequate, supported by cash balances of €166 million as of 30 September 2025, and our expectation of Moody's-adjusted FCF generation, before any acquisitions, of about €390 million over the next 12-18 months. The company has a

€695 million senior secured revolving credit facility (RCF) with a springing maturity. This maturity is contingent upon the refinancing timeline of the existing senior secured notes due in 2028, ensuring the RCF's maturity precedes that of any remaining senior secured debt. The earliest maturity date for the RCF is October 2027.

The RCF is also subject to a springing covenant, which requires the company to maintain net senior secured debt/EBITDA of less than 6.0x if at least 40% of the senior secured RCF is drawn. The RCF was drawn at €150 million as of 30 September 2025 and the covenant was therefore not tested. Further increase in leverage could restrict its RCF access to only 40% of its total capacity.

Exhibit 7
Cheplapharm does not face any large maturity before 2028
Debt maturity profile



As of 30 September 2025. Source: Company data

Structural considerations

Cheplapharm's debt comprises a senior secured term loan B and senior secured notes, as well as a senior secured RCF, all rated B3 in line with the CFR. All these debt instruments have been issued by Cheplapharm, the group's main operating company, and they share the same collateral, which includes a first-priority pledge over Cheplapharm's shares, as well as pledges over bank accounts and intercompany receivables. We use a family recovery rate of 50%, appropriate for a debt structure comprising bank and bond debts. Cheplapharm's capital structure also comprises €500 million in shareholder loans, which we treat as equity.

Methodology and scorecard

The principal methodology used in rating Cheplapharm was our Pharmaceuticals rating methodology. The B3 rating assigned to Cheplapharm is one notch below the scorecard-indicated outcome based on our forward-looking view, and reflects the execution risks associated with the remediation of the company's current operational issues and the integration of its recent acquisitions, as well as weak credit metrics.

Exhibit 8

Cheplapharm Arzneimittel GmbH

Pharmaceuticals Industry Scorecard [1][2]	Current LTM	June 30 2025	Moody's 12-18 Month For	ward View [3]
	Measure	Score	Measure	Score
Factor 1: Scale (25%)				
a) Revenue (USD Billion)	1.7	В	1.6 - 1.7	В
Factor 2: Business Profile (40%)				
a) Product and Therapeutic Diversity	Ва	Ва	Ва	Ва
b) Geographic Diversity	Ваа	Baa	Ваа	Baa
c) Patent Exposures	Ва	Ва	Ва	Ва
d) Pipeline Quality	Caa	Caa	Caa	Caa
Factor 3: LEVERAGE & CASH COVERAGE (20%)				
a) Debt / EBITDA	7.0x	Caa	6.4x - 6.7x	Caa
b) RCF / Net Debt	8.1%	В	9.0% - 11.0%	В
c) EBIT / Interest Expense	0.0x	Ca	0.1x - 0.2x	Ca
Factor 4: Financial Policy (15%)				
a) Financial Policy	В	В	В	В
Ratings				
a) Scorecard-Indicated Outcome		B2		B2
b) Actual Rating Assigned				B3

^[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Ratings

Exhibit 9

Category	Moody's Rating
CHEPLAPHARM ARZNEIMITTEL GMBH	
Outlook	Stable
Corporate Family Rating	В3
Sr Sec Bank Credit Facility -Dom Curr	В3
Senior Secured	B3/LGD4
Source: Moody's Ratings	

Appendix

Exhibit 10

Moody's-adjusted debt reconciliation Cheplapharm Arzneimittel GmbH

(in € millions)	2020	2021	2022	2023	2024	LTM Jun-25
As reported debt	2,620.0	2,727.0	3,046.2	4,243.0	4,511.2	4,419.3
Pensions	-	-	-	-	2.6	2.6
Hybrid Securities	-	-	-	(168.5)	(149.3)	(138.3)
Moody's-adjusted debt	2,620.0	2,727.0	3,046.2	4,074.5	4,364.5	4,283.6

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Rated entity - Cheplapharm Arzneimittel GmbH, financials under entity Cheplapharm SE.

Source: Moody's Financial MetricsTM

^[2] As of June 30, 2025(LTM)

^[3] This represents Moody's Forward View; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures Source: Moody's Financial Metrics Moody's Projections

Exhibit 11
Moody's-adjusted EBITDA reconciliation
Cheplapharm Arzneimittel GmbH

(in € millions)	2020	2021	2022	2023	2024	LTM Jun-25
As reported EBITDA	362.1	618.9	779.1	736.4	666.4	608.2
Unusual Items	13.2	7.4	(90.9)	-	-	-
Moody's-adjusted EBITDA	375.3	626.3	688.2	736.4	666.4	608.2

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Rated entity - Cheplapharm Arzneimittel GmbH, financials under entity Cheplapharm SE.

Source: Moody's Financial MetricsTM

Exhibit 12

Overview on select historical and forecast Moody's-adjusted financial data
Cheplapharm Arzneimittel GmbH

(in € millions)	2020	2021	2022	2023	2024	LTM Jun-25	2025F	2026F	2026F
INCOME STATEMENT									
Revenue	640	1,082	1,279	1,498	1,535	1,540	1,560	1,498	1,513
EBITDA	375	626	688	736	666	608	637	611	635
EBIT	170	296	305	252	73	6	31	30	49
BALANCE SHEET									
Cash & Cash Equivalents	93	97	160	534	227	221	74	420	820
Total Debt	2,620	2,727	3,046	4,074	4,365	4,284	4,218	4,215	4,215
CASH FLOW									
Retained Cash Flow (RCF)	259	438	468	536	374	329	328	345	379
RCF / Debt	9.9%	16.1%	15.4%	13.2%	8.6%	7.7%	8.1%	8.5%	9.3%
FCF before acq. of intangibles	218	292	438	340	161	184	211	364	413
FCF (before acq. of intangibles) / Debt	8.3%	10.7%	14.4%	8.4%	3.7%	4.3%	5.2%	8.9%	10.2%
FCF after acq. of intangibles	(941)	(216)	(157)	(1,162)	(551)	(236)	144	349	398
FCF (after acq. of intangibles) / Debt	-35.9%	-7.9%	-5.2%	-28.5%	-12.6%	-5.5%	3.5%	8.6%	9.8%
PROFITABILITY									
Change in Sales (YoY)		69.2%	18.3%	17.1%	2.4%	-4.2%	1.7%	-4.0%	1.0%
EBIT Margin	26.6%	27.3%	23.9%	16.8%	4.8%	0.4%	2.0%	2.0%	3.2%
EBITDA Margin	58.7%	57.9%	53.8%	49.1%	43.4%	39.5%	40.8%	40.8%	42.0%
INTEREST COVERAGE									
EBIT / Interest Expense	1.9x	2.2x	1.5x	1.1x	0.3x	0.0x	0.1x	0.1x	0.2x
EBITDA / Interest Expense	4.3x	4.6x	3.4x	3.1x	2.4x	2.2x	2.2x	2.1x	2.2x
LEVERAGE									
Debt / EBITDA	7.0x	4.4x	4.4x	5.5x	6.5x	7.0x	6.4x	6.7x	6.4x
Net Debt / EBITDA	6.7x	4.2x	4.2x	4.8x	6.2x	6.7x	6.3x	6.0x	5.1x

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Rated entity - Cheplapharm Arzneimittel GmbH, financials under entity Cheplapharm SE.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

© 2025 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 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 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 Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings and credit rating processes. Information regarding crudian 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 ir.moodys.com under the heading "Investor Relations — Corporate Governance — Charter and Governance 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 and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", 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 regulations. 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 1466803

10