

CREDIT OPINION

9 May 2025

Update



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RATINGS

Ratch Group Public Company Limited

Domicile	Thailand
Long Term Rating	Baa2
Type	LT Issuer Rating - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Ratch Group Public Company Limited

Update following rating downgrade to Baa2, outlook changed to stable

Summary

The downgrade of [Ratch Group Public Company Limited's](#) (Ratch, Baa2 stable) Baseline Credit Assessment (BCA) and issuer rating reflects the ongoing execution of Ratch's growth strategy, which is leading to pro-rata consolidated financial metrics remaining below the earlier downgrade trigger for the next few years. The rating action also captures uncertainties related to power demand in Thailand as we expect weaker growth in the country amid new US tariffs and heightened global uncertainty, as highlighted in our recent rating action on the [Thailand](#) (Baa1 negative) sovereign.

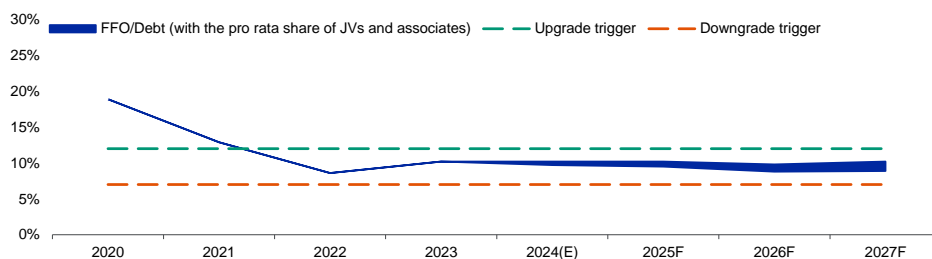
Capital expenditure (capex) pertaining to renewable energy projects, undertaken by Ratch's joint ventures (JVs) and associates, is expected to remain substantial over the next 2-3 years. These capex commitments will keep Ratch's financial metrics below the earlier downgrade trigger of 10% Funds From Operations (FFO)/debt ratio on a JV-adjusted basis. Until the projects start generating revenue, liquidity requirements will also remain elevated during a time of uncertainty in financial markets.

Ratch has significantly diversified its operating locations over the years. The overseas growth has increasingly relied on JVs and associates, over which Ratch does not have full control. Ratch's BCA continues to factor in Ratch's long-term PPAs, secured fuel supply, and stable operations in Thailand. Ratch's issuer rating continues to include a two-notch uplift based on our expectation of a high level of extraordinary support from, and the company's very high level of dependence on, the Government of Thailand.

We expect Ratch's standalone FFO/debt ratio, prior to pro-rata consolidation of its JVs and associates, will remain at 9-11% over the next 2-3 years, whereas on a pro-rata consolidated basis, this range is expected to adjust to 7-9%.

Exhibit 1

FFO/debt ratio, on a pro-rata consolidated basis, will remain 7-9% over the next 2-3 years



All data are based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. The metrics are after adjustments for lease receivables and are based on the pro rata consolidation of Ratch's joint ventures (JVs) and associates. 2024(E) data is based on Ratch's consolidated results using Moody's estimates on JVs. Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

Credit strengths

- » High likelihood of government support because of the company's strategic importance to Thailand's power sector
- » Greater geographic diversification through overseas expansion
- » Cash flow predictability underpinned by long-term PPAs and secured fuel supply

Credit challenges

- » Sizable JV capex weighs on pro-rata consolidated financial metrics
- » Growing reliance on joint ventures introduces complexity and additional risks
- » Power demand uncertainties amid sweeping US tariffs

Rating outlook

The stable outlook reflects our expectation that while executing on its growth plans, Ratch's financial metrics will be sustained at current levels, including a FFO/debt ratio ranging between 7% and 9% over the next 2-3 years.

Factors that could lead to upgrade

A BCA upgrade could occur if Ratch's financial profile strengthens such that the FFO/debt ratio to above 12% on a sustained basis, based on the pro-rata consolidation of its JVs and associates. An issuer rating upgrade could also occur if the sovereign rating does not exert a constraint at that point in time.

Factors that could lead to downgrade

A BCA or rating downgrade could occur if Ratch pursues a more aggressive expansion plan than what we expected, introducing additional business or regulatory risks or requiring more debt-backed funding. This could lead to weaker credit metrics, including a FFO to debt ratio below 6-7% on a sustained basis, based on the pro-rata consolidation of its JVs and associates.

Key indicators

Exhibit 2

Ratch Group Public Company Limited

Before pro-rata consolidation of Ratch's JVs and associates	Dec-2022	Dec-2023	Dec-2024
(CFO Pre-W/C + Interest) / Interest (3 year average)	4.9x	3.8x	3.4x
(CFO Pre-W/C) / Debt (3 year average)	12%	10%	10%
RCF / Debt (3 year average)	7%	6%	6%
After pro-rata consolidation of Ratch's JVs and associates	Dec-2022	Dec-2023	Dec-2024(E)
(CFO Pre-W/C + Interest) / Interest (3 year average)	3.8x	3.4x	2.8x - 3.0x
(CFO Pre-W/C) / Debt (3 year average)	11%	10%	9% -10%
RCF / Debt (3 year average)	8%	8%	7% - 8%

All data are based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. The metrics are after applying adjustments for lease receivables. 2024(E) data is based on Ratch's consolidated results using Moody's estimates on JVs and associates.

Source: Moody's Financial Metrics™

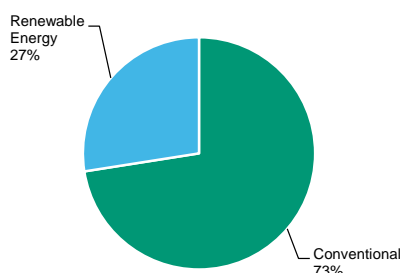
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody.com> for the most updated credit rating action information and rating history.

Profile

Ratch Group Public Company Limited was founded and listed on the Stock Exchange of Thailand in 2000. Electricity Generating Authority of Thailand (EGAT), which owns a 45% stake, is the company's largest shareholder and the off-taker of most of its power generation capacity in Thailand and Laos. EGAT is fully owned by the Thailand government and is mainly involved in energy generation and transmission throughout the country. Ratch's key operations are in Thailand, [Australia](#) (Aaa stable), [Laos](#) (Caa3 stable) and [Indonesia](#) (Baa2 stable). As of January 2025, Ratch's has 9.4GW power generating capacity under operations and 1.4GW under development.

Exhibit 3

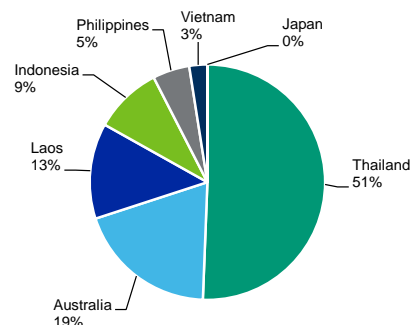
Power plant mix by fuel as of January 2025



Source: Company filings

Exhibit 4

Power plant mix by country as of January 2025



Source: Company filings

[RH International \(Singapore\) Corp. Pte. Ltd.](#) (RHIS, Baa2 stable) is a wholly owned indirect subsidiary of Ratch. RHIS was incorporated with limited liability under the laws of the Republic of Singapore in September 2010. RHIS is an investment holding company, which primarily undertakes Ratch's investments and offshore projects in the power generation sector. The subsidiary is also involved in raising funds to meet Ratch's capital requirements. Both RHIS' medium-term notes program and outstanding senior unsecured notes are guaranteed by Ratch.

Detailed credit considerations

Sizable JV capex weighs on pro-rata consolidated financial metrics

The rating actions reflect the ongoing execution of Ratch's growth strategy, which is leading to pro-rata consolidated financial metrics remaining below the earlier downgrade trigger for the next few years. Capex pertaining to renewable energy projects, undertaken by Ratch's JVs and associates, is expected to remain substantial over the next 2-3 years.

Ratch has demonstrated a strong appetite for growth over the past few years. This includes the acquisition of a 36% equity stake in PT Paiton Energy (PE), which operates a 2,045 MW coal-based project in Indonesia, in 2024. Additionally, Ratch acquired Nexif Energy Joint Venture (NEJV) in 2022, which owns a portfolio of battery energy storage, renewable, and gas-fired projects, totaling 1,515.8 MW of attributable capacity.

Currently, Ratch has approximately 1.4GW of greenfield capacity in the pipeline, with additional capacities under feasibility study. Around 60% of the 1.4GW is expected to be developed through JVs or associates. The renewable energy projects that constitute the 1.4GW span various countries, with a significant focus on Australia, the Philippines, and Laos, and will require an annual average equity injection of THB 6-8 billion from 2025 to 2026, along with additional project debt drawdowns. We have conservatively assumed that all disclosed projects forming the 1.4GW will be commissioned according to the target timeline announced by the company, and the capex will follow a debt-equity funding mix comparable to the historical average level of capex projects Ratch has undertaken in the past.

Although we continue to regard Ratch's credit quality to be investment grade, these capex commitments will keep Ratch's financial metrics below the earlier downgrade trigger of 10% FFO/debt ratio. Until the projects start generating revenue, liquidity requirements will also remain elevated during a time of uncertainty in financial markets.

Additionally, there is an added layer of uncertainty stemming from the increasing uncertainties regarding Thailand's economic and fiscal stability amid sweeping US tariffs. The downward revision of Thailand's GDP projection, as highlighted in our recent Thailand sovereign rating action, may translate into reduced power demand growth within the country.

We expect Ratch's standalone FFO/debt ratio, prior to pro-rata consolidation of its JVs and associates, will remain at 9-11% over the next 2-3 years, whereas on a pro-rata consolidated basis, this range is expected to adjust to 7-9%.

High likelihood of government support because of its strategic importance to Thailand's power sector

Ratch's issuer rating continues to include a two-notch uplift based on our expectation of a high level of extraordinary support from, and the company's very high level of dependence on, the Government of Thailand, under our Joint Default Analysis (JDA) approach for government-related issuers (GRIs). This support assessment reflects the 45% effective ownership by the government in Ratch and its high strategic importance as one of Thailand's largest Independent Power Producers (IPP).

Ratch will continue to benefit from its strategic importance to the country's power sector because of its position as one of the leading private power generators in Thailand. Its expansion into neighboring countries also supports the government's promotion of imported electricity. Ratch's attributable generation capacity (including projects in Laos that have PPAs with EGAT) currently accounted for 10-15% of Thailand's total capacity. However, this percentage is expected to dip below 10% after the expiration of the PPAs for the 1.47 GW and 2.17 GW Ratchaburi Power Plants (RG) in 2025 and 2027, respectively.

We expect Ratch to maintain its close links with EGAT because the parent is its single-largest shareholder and the off-taker for most of its existing domestic capacity, as well as its capacity from its plants in Laos. We expect EGAT to support the company in times of need because of the latter's strategic importance to Thailand's power sector. EGAT also provides operating and maintenance services for most of Ratch's plants and supports the company in environmental management. Ratch's power plants maintain high performance standards, with minimal forced outages, because of the strong operational support from its parent.

EGAT holds effective control over Ratch. Six of Ratch's 12 board members, including its chairman and CEO, are EGAT representatives. Several of Ratch's key management officers have also previously worked for EGAT. EGAT is the single-largest shareholder, with the remaining shares in Ratch being widely held. Therefore, EGAT consolidates Ratch because of its effective control over the company.

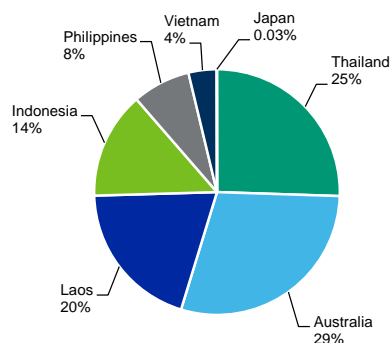
Greater geographic diversification achieved through overseas expansion

Ratch has significantly diversified its operating locations over the years, establishing a presence across Thailand, Australia, Indonesia, and Laos. This geographic diversification is helpful to mitigate country-specific risks.

In recent years, Ratch has significantly expanded its Australian portfolio through its subsidiary RATCH Australia Corporation Pty Ltd (RAC) and Australia-based assets acquired under NEJV in 2022. Australia currently comprises 40% of Ratch's 10.8GW capacity, which is projected to increase to around 30% following the expiration of RG's PPAs, assuming no other capacity changes occur. Additionally, Ratch has bolstered its presence in Indonesia through the acquisition of a stake in PE, which is expected to represent around 15% of total capacity post-RG PPA expirations.

In Laos, Ratch currently maintains a fleet of power projects with a capacity of 1.4 GW through joint ventures and associates, which accounts for around 13% of its total capacity and is expected to account for 20% following the expiration of the RG PPA. This presence in Laos has exposed Ratch to regulatory and political risks within Laos. However, these risks are mitigated to some extent by several factors: 1) most capacity is off-taken by EGAT, 2) protective provisions in concession agreements and PPAs, which allows Ratch to terminate contract and receive termination and compensation from the Government of Laos in a political force majeure event, and 3) the involvement of local partners or the government in joint ventures.

Exhibit 5

Capacity by country after the PPAs of the two Ratchaburi Power Plants expire in 2025 and 2027

Around 90% of the PPAs in Laos are offtaken by EGAT.

Source: Company filings

Growing reliance on JVs introduces complexity and additional risks

The overseas growth has increasingly relied on JVs and associates, over which Ratch does not have full control. The reliance on JVs and associates is expected to increase further following the expiration of the 3.7GW Power Purchase Agreement (PPA) of the RG in Thailand.

Currently, 4.7 GW of Ratch's 10.8 GW total capacity is owned through joint ventures and associates, representing 44% of its capacity. This percentage is expected to increase to nearly 70% following the expiration of RG's PPA. Increasing reliance on joint ventures and associates adds organizational complexity and heightens risks related to financial transparency and timeliness. A significant portion of Ratch's capital expenditure program over the next 2-3 years will involve joint ventures or associates, which offers limited transparency regarding development progress, capex deployment, and funding plans.

Increased JV exposure may result from Ratch's involvement in non-power businesses, such as the MRT Pink Line, MRT Yellow Line, and an underground fiber-optic network project in Thailand. These ventures diverge from Ratch's core business and may present additional risks. However, the impact is somewhat mitigated by the absence of planned further investment in non-power sectors and the fact that non-power businesses contribute less than 5% to overall EBITDA.

Cash flow predictability underpinned by long-term PPAs and secure fuel supply

Ratch's BCA continue to factor in Ratch's long-term PPAs, secured fuel supply, and stable operations in Thailand, which underpins cash flow predictability.

EBITDA derived from the Thai IPP PPAs accounts for around 50-60% of EBITDA on a pro-rata consolidated basis. Major IPP power plants include the RG, Hongsa Thermal Power Plant in Laos, PE in Indonesia, and the newly commissioned Hin Kong Power Plants units 1 and 2. For the power plants in Thailand and Laos, PPAs are predominantly contracted with EGAT, while PE is contracted with PLN. Except for the RG whose PPAs are expiring soon, the remaining IPP power plants have PPA lifespans of 15-25 years.

IPP PPAs stipulate availability payments, which cover fixed operational and maintenance costs, interest costs, and provide an agreed return on equity. These payments are received irrespective of electricity dispatch, as long as the power plants are available at the agreed capacity. The availability payments from the RG have been decreasing and are expected to cease entirely following the PPA expiration. However, the loss is expected to be offset by contributions from newly added IPPs, including Paiton and Hin Kong, on a pro-rata consolidated basis.

Another 10-15% of EBITDA is derived from SPP PPAs of cogeneration gas-fired power plants. There is also an availability-based capacity payment under the tariff, though the percentage of capacity payment is smaller than that for IPP power projects.

Both IPP and SPP PPAs are structured to limit the impact of fluctuations in both fuel costs and foreign-exchange rates. Under energy payment provisions of the PPAs, the company is insulated from fluctuations in fuel input prices, which allows it to pass through any

increases in fuel costs as long as its plants meet the agreed heat rates. The unique characteristics embedded in PPAs differentiate the company from some other unregulated power companies that have high exposure to volatility in wholesale fuel prices.

Ratch has a solid track record of maintaining high levels of availability, often exceeding plant-specific targets, and regularly meeting the targeted heat rates for its power projects. While EGAT has a strong track record of meeting its PPA obligations.

For its fuel supply, Ratch has secured stable gas supplies to meet its obligations under the PPAs, through gas sales agreements with [PTT Public Company Limited](#) (Baa1 negative).

ESG considerations

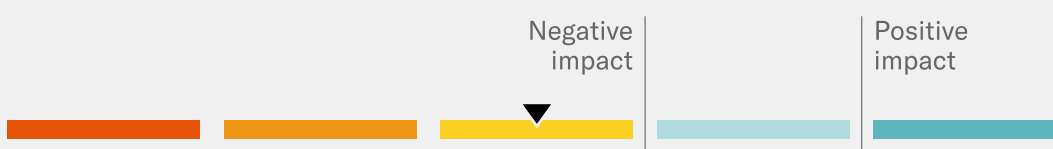
Ratch Group Public Company Limited's ESG credit impact score is CIS-3

Exhibit 6

ESG credit impact score

CIS-3

Score



ESG considerations have a limited impact on the current rating, with potential for greater negative impact over time.

Source: Moody's Ratings

Ratch Group Public Company Limited's (Ratch) **CIS-3** indicates that ESG considerations have a limited impact on the ratings of Ratch with potential for greater negative impact over time, partly due to the company's increasingly intricate organizational structure, with growth via joint ventures and associates as a result of its diversification strategy. This complexity may pose potential challenges to financial transparency and timeliness of disclosures related to the JVs.

Exhibit 7

ESG issuer profile scores

E-3

Environmental

S-3

Social

G-3

Governance

Score



Source: Moody's Ratings

Environmental

Ratch's **E-3** reflects its exposure to carbon transition because of thermal fleets in its generation portfolio, partly mitigated by the company's strategy to increase its renewable generation capacity. It also considers physical climate risks potentially stemming from extreme weather conditions.

Social

Ratch's **S-3** primarily reflects the higher risk of demographics and societal trends owing to a risk that public concern over environmental or social issues could lead to adverse regulatory political intervention.

Governance

Ratch's **G-3** reflects its demonstrated commitment to its diversification and growth strategy. Such a commitment has resulted in a discernible shift towards a more accommodating financial policy and a persistent increase in its financial leverage. The score also takes into consideration the increasingly intricate organizational structure, with growth via joint ventures and associates as a result of its diversification strategy. This complexity may pose potential challenges to financial transparency and timeliness of disclosures related to the JVs.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.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

As of December 2024, Ratch's cash holdings was THB8.9 billion. We expect Ratch's annual FFO to range between THB16-18 billion over 2025-2026 on a pro-rata consolidated basis. We have conservatively assumed that Ratch's annual capex will be in the range of THB 20-30 billion on a pro-rata consolidated basis. Consequently, the cash holdings and annual FFO will not be sufficient to cover the sizable capex and debt service requirements. As a result, we expect that Ratch will need to raise external financing to address the shortfall.

Ratch will still need to rely on external sources when considering liquidity before the pro-rata consolidation of the JVs. The annual FFO is expected to be in the range of THB9-10 billion over 2025-2026, which is not sufficient to cover annual capex and equity injection of THB7-11 billion and annual mandatory debt payments of THB10-18 billion.

However, its solid access to funding markets, its status as a subsidiary of EGAT and the likelihood of support from EGAT when needed will temper the liquidity risk.

Methodology and scorecard

Ratch is rated under Unregulated Utilities and Unregulated Power Companies rating methodology. Ratch's business profile is closer to that of an unregulated power company because its business is governed by PPAs, based on bilateral negotiations with off-takers. The company's scorecard-indicated outcome has been Ba1 for 2022-2024 and is expected to remain at Ba1 based on forward-looking metrics which incorporate the pro-rata JV adjustments. Actual BCA is assigned at ba1.

The difference between the BCA and the final rating reflects our expectation of parental support in times of need. The final issuer rating of Baa2 is within the scorecard-indicated range under our JDA, based on the high likelihood of support from and its very high default dependence on the Government of Thailand.

Exhibit 8

Rating factors

Ratch Group Public Company Limited

Unregulated Utilities and Unregulated Power Companies Industry Grid		2024(E)		Moody's 12-18 Month Forward View	
Factor 1 : Scale (10%)	Measure	Score	Measure	Score	
a) Scale (USD Billion)	Baa	Baa	Baa	Baa	
Factor 2 : Business Profile (35%)					
a) Market Diversification	Aa	Aa	Aa	Aa	
b) Hedging and Integration Impact on Cash Flow Predictability	A	A	A	A	
c) Market Framework & Positioning	Baa	Baa	Baa	Baa	
d) Capital Requirements and Operational Performanc	Baa	Baa	Baa	Baa	
e) Business Mix Impact on Cash Flow Predictability	n/a	n/a	n/a	n/a	
Factor 3 : Financial Policy (15%)					
a) Financial Policy	Ba	Ba	Ba	Ba	
Factor 4 : Leverage and Coverage (40%)					
a) CFO pre-WC + Interest / Interest (3 Year Avg)	2.8x - 3.0x	Ba	2.5x - 3.0x	B - Ba	
b) CFO pre-WC / Debt (3 Year Avg)	9% -10%	B	8% - 10% ⁽¹⁾	B	
c) RCF / Debt (3 Year Avg)	7% - 8%	B	6% - 8%	B	
Rating:					
a) Scorecard-indicated Outcome		Ba1		Ba1	
b) Actual BCA Assigned				ba1	
Government-Related Issuer					
		Factor			
a) Baseline Credit Assessment		ba1			
b) Government Local Currency Rating		Baa2			
c) Default Dependence		Very High			
d) Support		High			
e) Final Rating Outcome		Baa2			

All data are based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. The metrics are after adjustments for lease receivables and are based on the pro rata consolidation of Ratch's JVs and associates.

(1) Our forward view for the pro rata consolidated 1 year CFO pre-WC / Debt is around 7%-9%.

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

Appendix

Exhibit 9

Peer comparison

(in \$ millions)	Ratch Group Public Company Limited			Cikarang Litrindo (P.T.)			Pertamina Geothermal Energy		
	Baa2 Stable			Baa3 Stable			Baa3 Stable		
	FY Dec-22	FY Dec-23	FY Dec-24	FY Dec-22	FY Dec-23	FY Dec-24	FY Dec-22	FY Dec-23	FY Dec-24
Revenue	2,137	1,256	940	550	546	547	386	406	407
EBITDA	343	410	452	208	199	192	315	361	375
TOTAL ASSETS	6,629	6,254	6,286	1,362	1,324	1,337	2,469	2,952	2,994
Total Debt	2,866	2,645	2,747	556	510	513	959.7x	744	754
(CFO Pre-W/C + Interest) / Interest Expense	283%	263%	294%	636%	561%	629%	1103%	756%	829%
(CFO Pre-W/C) / Debt	6%	8%	9%	29%	26%	28%	23%	33%	35%
RCF / Debt	2%	4%	5%	17%	11%	15%	20%	19%	18%
Debt / Book Capitalization	47%	44%	46%	44%	42%	42%	43%	27%	27%

All data are based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology.

The metrics are before adjustments for lease receivables and are before pro rata consolidation of Ratch's JVs and associates.

Source: Moody's Financial Metrics™

Exhibit 10

Moody's-adjusted debt reconciliation

Ratch Group Public Company Limited

(in THB millions)	2021	2022	2023	2024
As reported debt	61,119	98,975	89,970	93,334
Pensions	267	293	326	338
Non-Standard Adjustments	1,939	0	0	0
Moody's-adjusted debt	63,325	99,268	90,296	93,672

All data are based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology.

The metrics are before adjustments for lease receivables and are before pro rata consolidation of Ratch's JVs and associates.

Source: Moody's Financial Metrics™

Exhibit 11

Moody's-adjusted EBITDA reconciliation

Ratch Group Public Company Limited

(in THB millions)	2021	2022	2023	2024
As reported EBITDA	12,018	12,627	15,044	15,915
Pensions	23	20	0	0
Unusuals	(577)	(661)	(793)	0
Moody's-adjusted debt	11,465	11,986	14,251	15,915

All data are based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology.

The metrics are before adjustments for lease receivables and are before pro rata consolidation of Ratch's JVs and associates.

Source: Moody's Financial Metrics™

Ratings

Exhibit 12

Category	Moody's Rating
RATCH GROUP PUBLIC COMPANY LIMITED	
Outlook	Stable
Issuer Rating	Baa2
Senior Unsecured MTN	(P)Baa2
RH INTERNATIONAL (SINGAPORE) CORP. PTE. LTD.	
Outlook	Stable
Bkd Senior Unsecured	Baa2

Source: Moody's Ratings

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