

CREDIT OPINION

27 November 2023

Update

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RATINGS

Ratch Group Public Company Limited

Domicile	Thailand
Long Term Rating	Baa1
Type	LT Issuer Rating - Fgn Curr
Outlook	Negative

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 change in outlook to negative

Summary

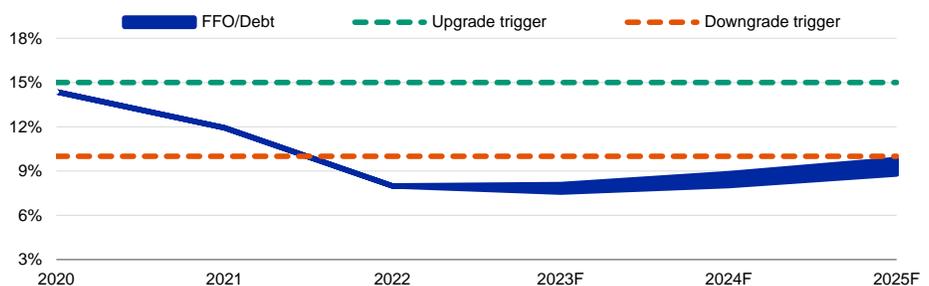
Ratch Group Public Company Limited's (Ratch, Baa1 negative) ratings incorporate the company's standalone credit quality of Baa3, and a two-notch uplift because of shareholder support from the Electricity Generating Authority of Thailand (EGAT), which is 100% owned by the Government of Thailand (Baa1 stable).

The recent outlook change to negative reflects Ratch's continued execution of its stated growth strategy, which will result in a persistent increase in the company's financial leverage. Completion of the company's announced acquisitions to date, as well as any potential future transactions, will keep projected financial metrics at levels below our expectations for Ratch's current rating level. Under our base-case projection, the company's funds from operations (FFO) to debt will remain at 7%-9% over the next one to two years, which is lower than the downgrade trigger of 10%. Ratch's FFO/debt was 8% in 2022, compared with a materially higher 12%-18% in 2018-21.

Ratch's business profile will incorporate an increasing share of overseas and non-power projects, due both to investments but also the contractual expiry of material power capacities in Thailand. 1.47 GW of its Thailand power purchase agreements (PPAs) will expire in 2025, with another 2.17 GW expiring in 2027.

At the same time, we continue to factor in its stable operations in Thailand in the company's rating, although Ratch's business profile is transforming with the continued execution of its strategy. Ratch's stable operations in Thailand under long-term PPAs and a secure fuel supply support its credit quality. The company has strong and strategic market positions as one of leading private power generators in the country. This strength, together with its close links with EGAT, underpins our assessment of support from EGAT in times of need.

Exhibit 1
Ratch's FFO/debt will remain weak despite a likely improvement in 2025



Metrics after adjustments for lease receivables and incorporating JVs.
Sources: Moody's Financial Metrics™ and Moody's Investors Service

Credit strengths

- » Strategic importance to Thailand's power sector
- » Long-term PPAs and secure fuel supply, which support stable performance for the core power business in Thailand
- » Close links with and expected support from its parent, EGAT, a state-owned power utility

Credit challenges

- » High financial leverage because of sizable capital spending and JV exposures
- » Incremental credit risks with expansion beyond core Thailand power operations, partly offset by diversification benefits
- » Associated governance risks as the company pursues growth strategy

Rating outlook

The negative outlook reflects Ratch's continued execution of its stated growth strategy, which will result in a persistent increase in the company's financial leverage.

Factors that could lead to an upgrade

Given the negative outlook and that the ratings are on par with the sovereign, an upgrade of Ratch's ratings is unlikely. However, we could revise its outlook to stable if the company can achieve a sustained recovery in its FFO/debt above 10%, based on the pro rata consolidation of its joint ventures. The sustainability of such a recovery in the financial metrics would be assessed based on the company's actions within a time period of less than a year.

Factors that could lead to a downgrade

We could downgrade Ratch's ratings if its projected credit metrics - FFO/debt - will be persistently below 10%, reflecting the completion of announced acquisitions or further debt-funded investments. Further heightening of business or regulatory risks, likely because of further overseas expansion, can also lead to a downgrade.

A downgrade of Thailand's sovereign rating, a reduction in EGAT's stake in the company, or meaningful decline in EGAT's ability to provide support to Ratch would also be negative for Ratch's ratings.

Key indicators

Exhibit 2

Ratch Group Public Company Limited

	Dec-2018	Dec-2019	Dec-2020	Dec-2021 [2]	Dec-2022 [3]
(CFO Pre-W/C + Interest) / Interest (3 year average)	8.1x	7.0x	6.4x	4.4x	3.5x
(CFO Pre-W/C) / Debt (3 year average)	35.3%	28.3%	21.9%	12.2%	7.8%
RCF / Debt (3 year average)	22.6%	17.6%	13.4%	5.5%	2.8%

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

[2] 31-Dec 21 ratios do not include lease receivables as a part of CFO Pre-W/C; if we add lease receivables back to CFO Pre-W/C the respective ratios would be 5.8x, 17.3% and 10.6%.

[3] 31-Dec 22 ratios do not include lease receivables as a part of CFO Pre-W/C; if we add lease receivables back to CFO Pre-W/C the respective ratios would be 4.9x, 12.1% and 7.1%.

Sources: Moody's Financial Metrics™ and Moody's Investors Service

Profile

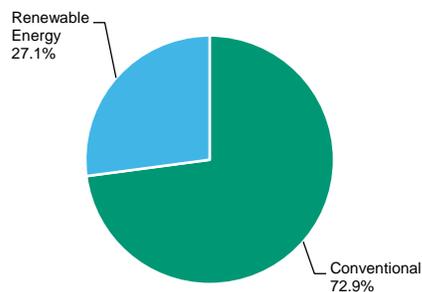
Founded and listed on the Stock Exchange of Thailand in 2000, Ratch Group Public Company Limited was established to purchase power plants from its parent, Electricity Generating Authority of Thailand. Ratch's key operations are in Thailand, Australia, Laos and Indonesia. As of October 2023, power generating capacity under operations and development totaled 10.8 gigawatts (GW), of which

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73% comprised conventional power plants such as coal- and gas-based plants. Capacity in Thailand accounted for around 51% of the company's total capacity.

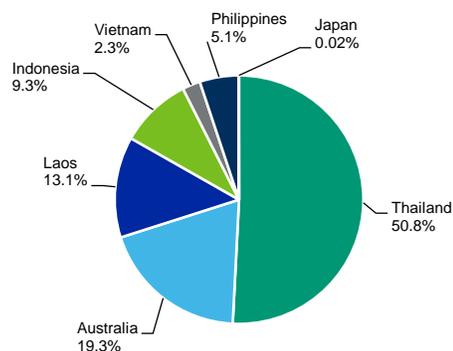
Ratch's business profile is transforming with the continued execution of its growth strategy. Ratch's business profile will incorporate an increasing share of overseas and non-power projects, due both to investments but also the contractual expiry of material power capacities in Thailand over time.

Exhibit 3

Power plant mix by fuel as of October 2023

Source: Company

Exhibit 4

Power plant mix by country as of October 2023

Source: Company

EGAT, with a 45% stake, is Ratch's largest shareholder and the sole off-taker of its power generation capacity. EGAT is fully owned by the Thailand government and is mainly involved in the generation and transmission of energy throughout the country.

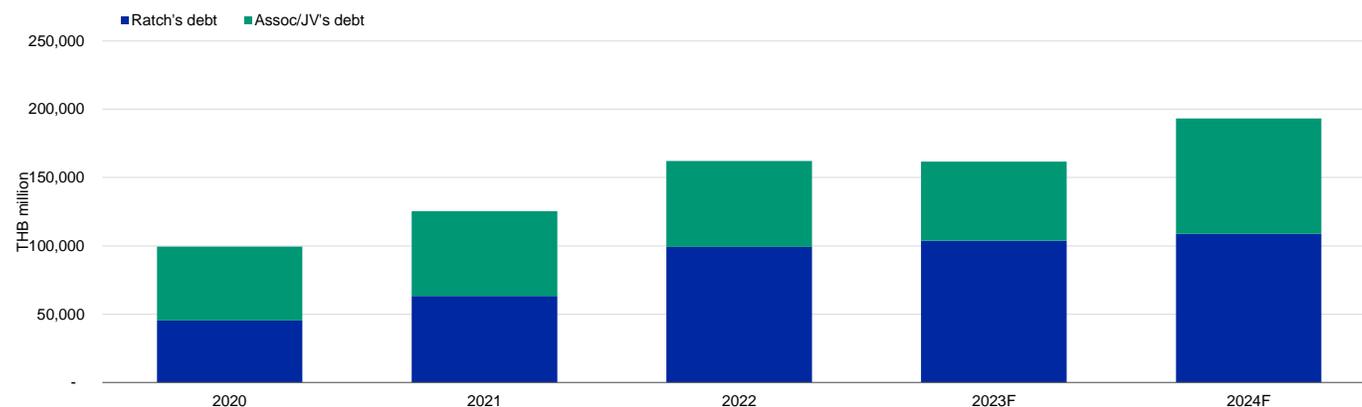
[RH International \(Singapore\) Corp. Pte. Ltd.](#) (RHIS, Baa1 negative) is a wholly owned indirect subsidiary of Ratch. RHIS was incorporated with limited liability under the laws of the Republic of Singapore in September 2010. RHIS is an investment holding company, which primarily undertakes Ratch's investments and offshore projects in the power generation sector. RHIS 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

High financial leverage because of sizable capital spending and JV exposures

The recent change in outlook to negative from stable reflects our view that Ratch's financial metrics will remain weak for the current rating level over the next one to two years. We expect Ratch's financial metrics, including the pro rata share from its JVs, to remain weaker than historical levels because of its sizable debt exposures at the JV level and large acquisitions.

Exhibit 5

Ratch's increasing debt including JV exposures

Sources: Moody's Financial Metrics™ and Moody's Investors Service

Specifically, we expect Ratch's FFO/debt to remain at 7%-9% over the next one to two years, which is lower than the downgrade trigger of 10%. Ratch's FFO/debt was 8% in 2022, compared with a materially higher 12%-18% in 2018-21.

Ratch's financial metrics have weakened because of substantial capital spending to increase its capacity and diversify its business mix away from Thailand's power sector. Ratch's metrics will likely gradually improve over time as its invested assets contribute cash flows. However, we now expect that the improvement will take a longer trajectory than earlier expected, due both to the magnitude of its acquisitions to date and the likelihood of further capital spending.

Our financial metrics are based on the pro-rata consolidation of Ratch's joint ventures. At the same time, we have factored in the collection of lease receivables in the company's FFO because it is the receipt of capacity payments.

Ratch's shareholders approved the acquisition of an equity stake in PT Paiton Energy (PE) in October 2021, which operates a 2,045MW coal-based project in Indonesia. The transaction is yet to close, and Ratch will hold a 36% share in PE once it is completed. This project has long-term PPAs with [Perusahaan Listrik Negara \(P.T.\)](#) (Baa2 stable) with a remaining PPA period of about 20 years.

On 17 August 2022, Ratch announced the signing of a share purchase agreement to acquire Nexif Energy Joint Venture (NEJV), which owns a portfolio of battery energy storage, renewable and gas-fired projects, totaling 1,515.8MW of attributable capacity, of which 450.5MW is operational. The projects are located in Australia, Thailand, Vietnam and the Philippines, with PPAs with various off-takers, and some of them have merchant exposure. The NEJV transaction was completed in December 2022.

Incremental credit risks with expansion beyond core Thailand power operations, partly offset by diversification benefits

Ratch's strategy to expand overseas and diversify its business mix is mainly driven by the lack of opportunities to expand in Thailand's power sector. Ratch's plan to grow its overseas portfolio will provide diversification benefits, but the increased exposure, especially to other developing countries such as Laos, Indonesia and Vietnam, will introduce uncertainties in its credit profile. Potential credit impact can stem from execution risks, higher levels of regulatory risk and increasing capital requirements and organizational complexity.

Coupled with an organic decline in Ratch's contracted power capacity in Thailand, the company's strategy to diversify away from its core Thailand-related power generation operations is transforming the company's business profile. To reflect the incremental credit risks, we now have a tighter tolerance level for Ratch's financial metrics.

Incremental business risks could also come from its aim to increase its exposure to non-power businesses. One of Ratch's four targets for 2023-27 is to increase its non-power EBITDA to 5% or higher. Although its non-power business will remain relatively small, it would still increase its business risks. Ratch has participated in other non-power projects such as the MRT Pink Line Project and the MRT Yellow Line Project — through its 10% stake in the BSR JV — and an underground fiber-optic network project in Thailand.

The funding structure of Ratch's investments will continue to be an important factor in gauging its impact on the rating. Sizable debt exposures at Ratch's JVs will strain the company's adjusted credit metrics, which incorporate its pro rata share in the JVs. Ratch's credit

profile will be strained further if its new investment plan requires aggressive debt funding or represents a significant increase in Ratch's business risk profile.

Ratch intends to increase its operating generating capacity to 10GW by 2025 via both organic and inorganic routes — mergers and acquisitions — mostly in overseas markets. Ratch had 2.9GW of generation capacity under construction and development as of September 2023, which will help achieve its target on completion, not accounting for some decommissioning of capacity in Thailand in the next four years.

We expect Ratch's business portfolio to exhibit greater geographic diversification over time, while Thai operations will continue to support Ratch's credit quality. Although Ratch's Thailand power operations will remain important to the company, and Moody's continues to factor in its stable operations in Thailand in the company's rating, Ratch's business profile is transforming with the continued execution of its strategy.

As of June 2023, Australia was Ratch's second-largest market, accounting for 16% of its capacity. Laos is the next largest market at 14%. The new projects in Laos are exposed to higher regulatory risk than projects in Thailand and Australia because the political, regulatory and economic environment in Laos is less developed. Any changes in the legal system in Laos that hurt Ratch's project company's operations and ability to service its liabilities will constitute a political force majeure event. In such a scenario, Ratch's project company can terminate its contract and is entitled to compensation from the [Government of Laos](#) (Caa3 stable) under the concession agreements and EGAT's PPA. Ratch's exposure to Laos and its large capital spending obligations are further mitigated by the fact that Ratch has set up JVs with partners and local governments.

Strategic importance to Thailand's power sector

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. Thailand's growing energy needs have increased its reliance on private power generators and energy imports from neighboring countries, and Ratch is likely to benefit from the projected steady growth in electricity demand over the next three to five years.

Around 60%-70% electricity has been generated by private power generators in Thailand or imported from neighboring countries, which supports the importance of private power generators like Ratch.

Net electricity generation requirements of EGAT increased by 3.18% in 2022 from that a year earlier, following a 1.53% increase in 2021 and a 3% decrease in 2020 mainly because of the pandemic.

Thailand's Power Development Plan (PDP 2018-37) focuses on increased contribution from gas-fired power generation and reduced reliance on coal power generation. Ratch's operations are key to Thailand achieving the targets set under PDP 2018-37, which include increasing the country's generating capacity to 77.2GW by year-end 2037.

As of September 2023, Ratch's attributable generation capacity (including projects in Laos that have PPAs with EGAT) accounted for around 15% of Thailand's total capacity. Ratch's expansion into the neighboring countries also supports the government's promotion of imported electricity.

Close links with and expected support from its parent EGAT

Our assessment of support from EGAT to Ratch in times of need results in a two-notch uplift to Ratch's rating. We expect Ratch to maintain its close links with EGAT because the parent is Ratch's single-largest shareholder and the off-taker for most of its existing domestic capacity, as well as its capacity for its plants in Laos. We expect EGAT to support Ratch 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 EGAT.

Another indication of the close links between the two entities is the fact that six of Ratch's 12 board members, including its chairman and CEO, are EGAT representatives. A number 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 highly fragmented. As such, EGAT consolidates Ratch because of its effective control over the company.

During the Asian financial crisis of 1997-98, for instance, EGAT and the Thai government ensured the performance stability and debt-servicing ability of independent power producers by restructuring their PPAs to avoid huge foreign-exchange losses.

EGAT's ability to provide support is underpinned by its solid credit profile, which is bolstered by its role as a strategic state-owned enterprise, meaning that EGAT's credit profile is closely linked with that of the sovereign. Although EGAT's financial position has weakened due to recent insufficient fuel cost pass-throughs, its strategic role in the country's power sector and importance to the government will continue to support its credit quality.

Long-term PPAs and secure fuel supply support stable performance for the core power business in Thailand

Ratch's long-term PPAs and secure fuel supply will remain its key credit strengths. The PPAs are robustly structured to limit the impact of fluctuations in both fuel costs and foreign-exchange rates, as well as changes in demand and the company's debt-servicing ability. The unique characteristics embedded in PPAs differentiate Ratch from other unregulated power companies that we rate, which usually exhibit high exposures to wholesale price volatilities. However, 1.47GW of Ratch's PPAs will expire in 2025 and another 2.17GW in 2027, which will further accelerate Ratch's business transformation.

For its fuel supply, the company has secured stable gas supplies to meet its obligations under the PPAs, through gas sales agreements with [PTT Public Company Limited](#) (Baa1 stable). Currently, most of Ratch's capacity is secured by EGAT under long-term PPAs, ranging between four and 26 years. The renewable PPAs can be automatically renewed every five years. In addition, 93.6% and 6.4% of capacity from the Hongsa thermal power plant has been contracted to EGAT and the state-owned Electricite du Laos, respectively, under 25-year PPAs.

EGAT has a strong track record of meeting its PPA obligations. As a result, demand is assured and market competition is limited for Ratch's existing operations. Moreover, under energy payment provisions, Ratch is insulated from fluctuations in fuel input prices, allowing the company to pass through any increases in fuel costs, as long as its plants meet the agreed heat rates.

Ratch's cash flow is supported by availability payments, which cover the fixed operational and maintenance costs and interest costs, plus an agreed return on equity. Availability payments are received irrespective of the dispatch of electricity, as long as the power plants are available at the agreed capacity. Given this feature of Ratch's PPAs, its financial performance was not significantly hurt by the coronavirus pandemic in 2020-21, as well as in 2022 when fuel prices rose substantially.

Ratch has a solid track record of maintaining high levels of availability, often exceeding plant-specific targets, as well as regularly meeting the targeted heat rates for its power projects.

ESG considerations

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

Exhibit 6

ESG credit impact score

CIS-3



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

Source: Moody's Investors Service

Ratch Group Public Company Limited's (Ratch) **CIS-3** indicates that ESG considerations have a limited impact on the current rating with potential for greater negative impact over time. The score reflects our revised view on governance risks. Electricity Generating Authority of Thailand's (EGAT) support partly but does not wholly mitigate Ratch's exposure to ESG considerations.

Exhibit 7

ESG Issuer Profile Scores



Source: Moody's Investors Service

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. Ratch also continues to demonstrate appetite to invest in non-core businesses such as transportation. The score also takes into consideration the increasingly complex organizational structure, as Ratch pursues growth using the joint venture structure for its investments.

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.

Other considerations

We do not make a downward adjustment to the senior unsecured ratings because of structural subordination, based on:

- » our expectation that EGAT will likely support Ratch directly — in case of financial distress — as the holding company, thereby improving the position of holding company creditors over operating company creditors
- » the highly diversified nature of Ratch's subsidiaries and JV investments, which have independent and non-recourse financing
- » Ratch's plans to raise more debt at the holding company or at the RHIS level, or both, which would decrease the overall concentration of priority debt over time
- » the fair recovery expectation for creditors through Ratch's major operating subsidiary (RatchGen), which has a conservative leverage level

Liquidity analysis

Ratch has inadequate liquidity for the next 12 months and will need to raise external financing. As of September 2023, its cash sources comprised cash holdings of THB34.6 billion. We expect its annual operating cash flow to be THB7 billion-THB8 billion for the next 12 months, against its projected cash outlay for the same period, including capital spending of THB30 billion-THB35 billion, short-term debt of THB13 billion and the current portion of long-term debt of THB25 billion as of September 2023, and dividend payments.

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

Methodology and scorecard

When mapped to our [Unregulated Utilities and Unregulated Power Companies](#) rating methodology, published in May 2017, 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 is Ba1 based on forward-looking metrics, which incorporate the pro rata JV adjustments. The difference between its scorecard-indicated outcome and standalone credit quality can be explained by the current negative rating outlook, while the gap between the standalone credit quality and final rating reflects our expectation of parental support in times of need.

Exhibit 8

Rating factors

Ratch Group Public Company Limited

Unregulated Utilities and Unregulated Power Companies Industry Grid [1]	2022		Moody's 12-18 Month Forward View [2]	
Factor 1 : Scale (10%)	Measure	Score	Measure	Score
a) Scale (USD Billion)	A	A	A	A
Factor 2 : Business Profile (35%)				
a) Market Diversification	Baa	Baa	A	A
b) Hedging and Integration Impact on Cash Flow Predictability	Aa	Aa	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	Baa	Baa	Ba	Ba
Factor 4 : Leverage and Coverage (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	2.8x - 4.2x	Ba	1x - 4.2x	B - Ba
b) CFO pre-WC / Debt (3 Year Avg)	5% - 12%	B	5% - 12%	B
c) RCF / Debt (3 Year Avg)	8% - 15%	Ba	3% - 8%	B
Rating:				
a) Scorecard-indicated Outcome		Ba1		Ba1 - Ba2
b) Standalone credit quality				Baa3
c) Actual Rating Assigned				Baa1

[1] All ratios are based on adjusted financial data and incorporate Moody's global standard adjustments for nonfinancial corporations. Metrics after adjustments for lease receivables and incorporating JVs.

[2] As of November 2023. 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 Investors Service

Appendix

Exhibit 9

Peer comparison

	Ratch Group Public Company Limited			Cikarang Listrindo (P.T.)			Pertamina Geothermal Energy Tbk		
Rating / outlook	Baa1 Negative			Ba1 Stable			Baa3 Stable		
Standalone	Baa3			Ba1			Ba1		
(in US millions)	FY2020	FY2021	FY2022	FY2020	FY2021	FY2022	FY2020	FY2021	FY2022
Revenue	1,094	1,169	2,137	466	515	550	354	369	386
EBITDA	301	359	343	191	202	208	298	289	315
Total Assets	3,803	4,758	6,629	1,343	1,359	1,362	2,536	2,391	2,469
Total Debt	1,511	1,896	2,866	570	559	556	1,062	974	960
(CFO Pre-W/C + Interest) / Interest	6.1x	4.0x	2.8x	5.6x	6.1x	6.4x	6.4x	11.2x	11.2x
(CFO Pre-W/C) / Debt	18.9%	8.8%	5.5%	24.6%	27.2%	28.8%	20.1%	22.1%	23.6%
RCF / Debt	11.6%	3.4%	1.7%	13.5%	15.8%	16.6%	20.1%	22.1%	20.5%
Debt / Book Capitalization	42.1%	43.0%	46.8%	45.9%	44.5%	44.1%	50.8%	44.1%	43.2%

Ratch's metrics before adjustments for lease receivables and incorporating JVs.

Source: Moody's Financial Metrics™

Exhibit 10

Moody's-adjusted debt breakdown

Ratch Group Public Company Limited

THB mil	FY2019	FY2020	FY2021	FY2022
As Reported Debt	32,136.3	43,133.4	61,119.2	98,975.1
Pensions	203.8	225.5	266.7	293.0
Non-Standard Adjustments	1,879.9	1,920.7	1,938.8	-
Moody's - Adjusted Debt	34,220.0	45,279.6	63,324.7	99,268.2

Ratch's metrics before adjustments for lease receivables and incorporating JVs.

Source: Moody's Financial Metrics™

Exhibit 11

Moody's-adjusted EBITDA breakdown

Ratch Group Public Company Limited

THB mil	FY2019	FY2020	FY2021	FY2022
As Reported EBITDA	9,831.6	9,699.0	12,018.4	12,626.8
Pensions	24.8	24.7	23.4	19.8
Unusual	(137.4)	(304.5)	(576.8)	(661.1)
Moody's - Adjusted EBITDA	9,719.0	9,419.2	11,464.9	11,985.6

Ratch's metrics before adjustments for lease receivables and incorporating JVs.

Source: Moody's Financial Metrics™

Ratings

Exhibit 12

Category	Moody's Rating
RATCH GROUP PUBLIC COMPANY LIMITED	
Outlook	Negative
Issuer Rating	Baa1
Senior Unsecured MTN	(P)Baa1
RH INTERNATIONAL (SINGAPORE) CORP. PTE. LTD.	
Outlook	Negative
Bkd Senior Unsecured	Baa1
Bkd Senior Unsecured MTN	(P)Baa1

Source: Moody's Investors Service

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