

# RATCH GROUP

THAILAND / UTILITIES

# RATCH TB

# BUY

## A safe growth play

- Net profit upsides all around including additional capacity growth of 643MW in 2025E and 411MW in 2026E.
- Expect strong equity profit in 2024-26, backed by new capacity of HKP, newly acquired Paiton and renewable projects commencing.
- Reinitiate coverage of RATCH with BUY call and an SoTP-TP of THB36.

TARGET PRICE	THB36.00
CLOSE	THB30.50
UP/DOWNSIDE	+18.0%
TP vs CONSENSUS	+1.6%

### Another strategic IPP and renewable energy growth step in 2025-33

RATCH has several new equity capacity growth projects in the pipeline, with a combined capacity of 643MW set to commence CODs in 2025 and an additional 411MW in 2026. In 2025, the projects include the 392MW HKP block 2. Other projects include a 152MW solar farm in Australia, a 71MW NPSI solar farm in the Philippines, the 12MW NNEG extension (hydro), the 10MW LG2 battery (solar, Australia), and the 5.55MW Song Giang 1 (solar, Vietnam). For 2026, equity capacity growth should come from Lincoln Gap 3, a 252MW wind project in Australia, the 100MW LG3 battery (solar, Australia), and the 59MW Nexif Ben Tre wind project in Indonesia. Over the next five years, RATCH plans to add 1.7GW of capacity, with green projects accounting for 77% of the total. This supports the company's long-term strategy for sustainable growth, with the current renewable energy expected to contribute 27% of total revenue.

### Solid share of profits from IPPs and renewable energy in 2024-25

Despite a projected decline in RG's revenue over the next two years before its expiration in 2027, contributions from IPPs and SPPs are expected to provide timely replacements. This would result in a sharp increase in the share of profits from associate companies, potentially reaching THB9.4b in 2025, up 31% y-y. Key projects from HKP block 2 and the 742MW coal-fired Paiton Project will deliver full-year earnings, while RATCH's renewable energy segment should deliver mixed earnings results in 2025. Key contributors include a 152MW solar farm in Australia, the 71MW NPSI solar project in the Philippines, the 13MW NNEG Phase 3 expansion, and the LG3 Battery 2-3 project (110MW, solar).

### Expect net profit growth of 13% and 9% in 2025-26

We project RATCH's net profit for 2024-26 to be THB7b, THB7.9b, and THB8.6b, reflecting growth of 35.8% y-y, 12.8% y-y, and 9.1% y-y, respectively. Key drivers include higher earnings from IPPs. Contributions from the 392MW HKP block 1 starting in March 2024 and the full-year recognition of the Paiton Project starting in April 2024 should drive earnings. 2025 net profit growth should primarily be supported by new capacity additions, including the commissioning of HKP block 2, the solar farm project in Australia, and the NPSI project in the Philippines. 2026 earnings are set to be further bolstered by an additional 411MW of overseas renewable projects and the commencement of the Motorway M6 & M81 projects within 2026.

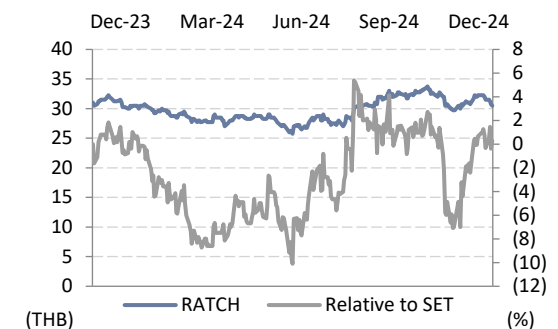
### BUY with our SoTP-based TP of THB36

We reinitiate coverage of RATCH with a BUY call and an SoTP-based TP of THB36 to reflect our valuation in 2025. We see RATCH as a safe growth play, driven by a stronger net profit growth momentum on new capacity set to come online in 2025-26.

### KEY STOCK DATA

YE Dec (THB m)	2023	2024E	2025E	2026E
Revenue	43,976	35,137	34,455	29,287
Net profit	5,167	7,018	7,919	8,640
EPS (THB)	2.38	3.23	3.64	3.97
vs Consensus (%)	-	(2.6)	(2.1)	10.4
EBITDA	7,249	7,093	6,390	6,515
Core net profit	5,167	7,018	7,919	8,640
Core EPS (THB)	2.38	3.23	3.64	3.97
EPS growth (%)	(11.1)	35.8	12.8	9.1

Core P/E (x)	12.8	9.5	8.4	7.7
Dividend yield (%)	5.2	5.6	5.9	5.9
EV/EBITDA (x)	15.7	18.3	20.4	19.8
Price/book (x)	0.7	0.7	0.6	0.6
Net debt/Equity (%)	35.5	48.4	46.8	43.7
ROE (%)	5.3	7.0	7.6	8.0



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	0.0	(6.2)	1.7
Relative to country (%)	6.0	(0.9)	2.9
Mkt cap (USD m)	1,920		
3m avg. daily turnover (USD m)	2.7		
Free float (%)	43		
Major shareholder	EGAT (45%)		
12m high/low (THB)	34.25/25.25		
Issued shares (m)	2,175.00		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

We see RATCH as a mid- to long-term play, thanks to its continued organic and inorganic capacity growth. In the near term, RATCH’s net profit growth should be driven by new growth projects (HKP, 362MW, gas) commencing their CODs in 1H25. In addition, Paiton is a long-term cash cow that can fill up the cash flow dents from the expiration of RG in 2024-27 and build its own operation in Indonesia.

We believe RATCH’s earnings momentum will improve in 2025, driven by: 1) stronger earnings contributions from HKP; 2) 2025E increase in equity capacity by more than 643MW; and 3) higher profitability and ROE driven by high-margin new capacity. RATCH aims to grow its renewable capacity in Australia, Laos, Indonesia, the Philippines and Vietnam, especially the Australian market, where it has long owned and operated RATCH-Australia (RAC) to operate a number of conventional and renewable power projects. RAC currently has a total capacity of 2GW with four new projects as future growth engines for RATCH as a passive investor.

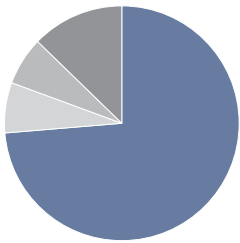
Company profile

RATCH is a holding company investing in electricity generating businesses. RATCH is Thailand’s largest power producer by equity capacity and most of its generating power capacity is via Independent Power Producers (IPP).

[www.ratch.co.th](http://www.ratch.co.th)

Principal activities (revenue, 2023)

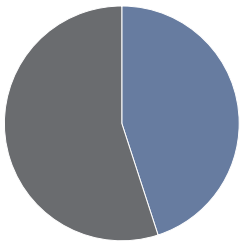
- Domestic electricity generating - 73.7 %
- International power projects - 6.9 %
- Revenue from finance lease contracts - 6.7 %
- Others - 12.7 %



Source: Ratch Group

Major shareholders

- EGAT - 45.0 %
- Others - 55.0 %



Source: Ratch Group

Catalysts

Higher power plant utilization rates and rising demand for electricity in Thailand and Australia are key potential upside catalysts.

Risks to our call

The downside risks to our SoTP-based TP include 1) lower-than-expected demand for electricity in Thailand; 2) lower crude price; and 3) delays in starting new projects.

Event calendar

Date	Event
Feb 2025	4Q24/2024 results announcement

Key assumptions

	2024E	2025E	2026E
Dispatched power (GWh)	43,446	43,446	37,060
Gas price (THB/mmBTU)	367	350	360

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in gas price, we estimate 2024 earnings would decline 1.1%, and vice versa, all else being equal.
- For every 1% increase in interest rate, we estimate 2024 earnings would decline 1.0%, and vice versa, all else being equal.

Source: FSSIA estimates

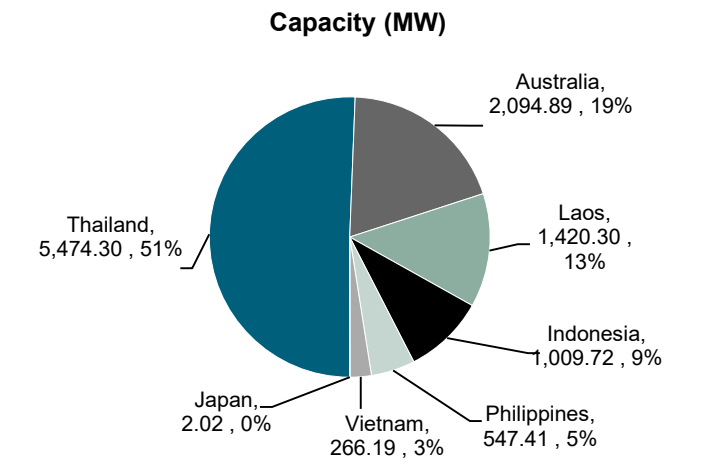
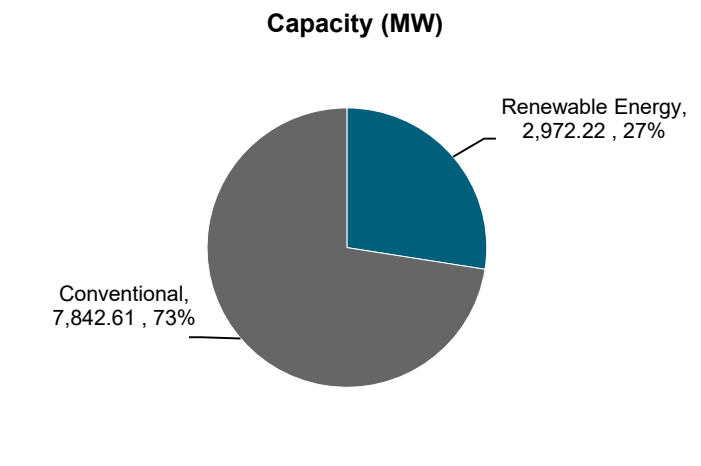
### Expect RATCH’s net profit to reach an all-time high in 2025

RATCH is a holding company investing in electricity generating businesses. RATCH is Thailand’s largest power producer by equity capacity and most of its generating power capacity is via independent power producers (IPP).

RATCH aims to grow its renewable capacity in Australia, Laos, Indonesia, the Philippines, and Vietnam, especially the Australian market, where it has long owned and operated RATCH-Australia (RAC) to operate a number of conventional and renewable power projects. RAC currently has a total capacity of 2 GW with four new projects as future growth engines for RATCH as a passive investor.

Exhibit 1: RATCH’s power plant portfolio by type of fuel

Exhibit 2: RATCH’s project presence



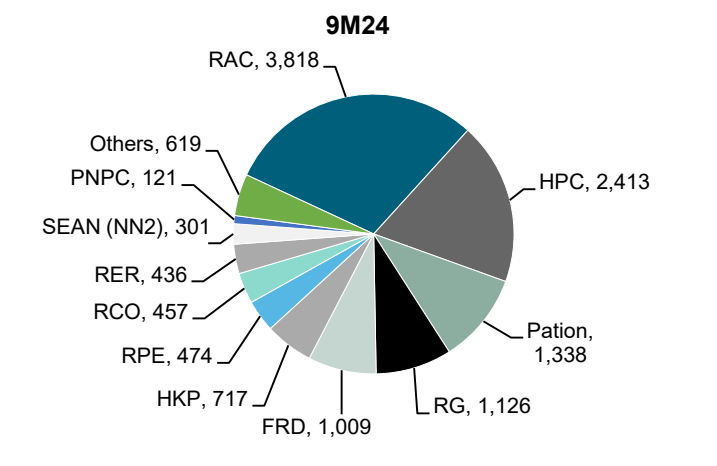
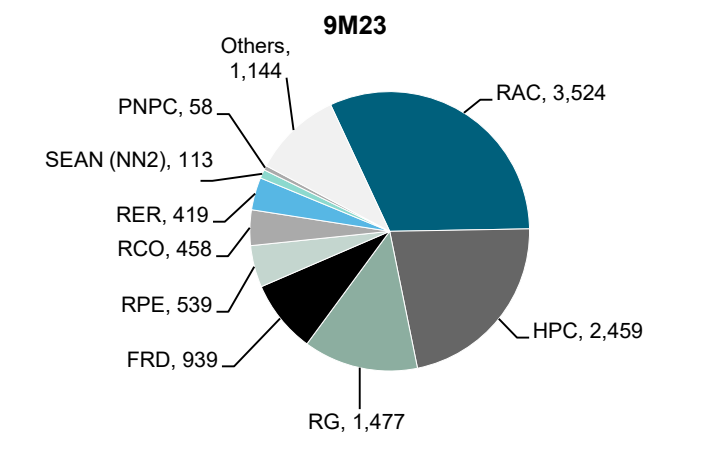
Sources: RATCH, as of October 2024

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In 9M24, RATCH’s EBITDA (including JV projects) was up by 15.3% y-y to THB12.8b, supported by recognizing a share of profit from HKP unit 1, which had its COD in March 2024, as well as the Paiton coal-fired thermal power plant which was acquired in April 2024. Meanwhile, the share of profits from PNPC and HPC declined mainly due to the THB weakening. Overall, more than 65% of RATCH’s total EBITDA came from overseas markets as of 9M24.

Exhibit 3: EBITDA breakdown in 9M23

Exhibit 4: EBITDA breakdown in 9M24



Source: RATCH

Source: RATCH

## Exhibit 5: RATCH's projects in operation

Project	Type	Location	Stake	Capacity		Contract life	Commercial	PPA
				Installed	EQ-owned			
RATCH's current projects								
IPP				6,675	4,803			
RG	Thermal	Ratchaburi (TH)	100%	1,470	1,470	25	Oct-00, Apr/Nov-02	2025E
RG	Combined Cycle	Ratchaburi (TH)	100%	2,175	2,175	25	Oct-00, Apr/Nov-03	2027E
HKP	Combined Cycle	Ratchaburi (TH)	51%	1,540	785	25	March-24, Apr/Jan-25	2050E
RPCL (Ratchaburi Power)	Combined Cycle	Ratchaburi (TH)	25%	1,490	373	25	Mar/Jun-08	2033E
SPP				1,097	562			
RW Cogen	Cogeneration	Ratchaburi (TH)	40%	235	94	25	Nov-14,Mar15	2039E/2040E
NNEG	Cogeneration	Prathum Thani (TH)	40%	142	57	25	Jun-16	2041E
Berkprai Cogeneration	Cogeneration	Ratchaburi (TH)	35%	99	35	25	2019E	2044E
Sahacogen	Combined Cycle	Chonburi Thailand	52%	153	79	25		2041E
NNEG expansion	Cogeneration	Prathum Thani (TH)	40%	60	24	25	2020E	2045E
RATCH Rayong	Combined Cycle	Rayong (TH)	51%	98	50	25	2022E	2047E
RER	Thermal		40%	31	12	25	2022E	2047E
IPS Korat	Thermal	Korat	49%	98	48	NA	2024E	NA
Ratch gen	Combined Cycle	Prathum Thani (TH)	100%	151	151	25	2022E	2047E
Renewable				347	96			
Huay Bong 3	Wind	Korat	20%	103.5	20.7	5, renewable	Nov-12	2021E
Huay Bong 2	Wind	Korat	20%	103.5	20.7	5, renewable	Feb-13	2021E
Korat3,Korat4,Korat7	Solar	Nakornratchasima	40%	21.6	8.64	5, renewable	Mar/May-12	2021E
Solarta	Solar	Ayutthaya	49%	42.3	20.73	5, renewable	Apr-11,2012	2021E
2 Solar Rooftop	Solar	Chonburi Thailand	52%	14.08	7.28	0		
BAFS Solar	Solar	Thailand	16%	36.4	5.65	0	NA	NA
Sahacogen (SCG)	Biomass	Thailand	55%	15.23	8.33	NA	Replacement - 2024 (RH acquired Dec 2021)	2024E
Songkhla	Biomass	Thailand	40%	10	4.0	5	2015	2025E
Overseas				9,726	3,846			
Collinsville Solar (SPP)	Solar	Queensland, Australia	100%	43	43	avg remain 6	Acquired in Jul-11	2030E
Nam Ngum 2	Hydro	Laos PDR	25%	615	154	27	Mar-11	2038E
Hongsa	Lignite-fired	Laos	40%	1,878	751	25	2015	2040E
EDL	Solar	Laos PDR	10%	19	2	NA	Acquired in Jan-11	NA
EDL	Hydro	Laos PDR	10%	1,958	198	NA	Acquired in Jan-11	NA
BAFS Solar	Solar	Japan	16%	13	2	NA	NA	NA
Calabanga	Solar	Philippines	49%	74	36	10	Aust-2024	2030E
Collector Wind farm	Wind	Australia	100%	227	227	14	1Q19E	2033E
Lincoln Gap 1&2	Wind	Australia	100%	212	212	15	4Q20E	2035E
Yandin	Wind	Australia	70%	214	150	15	3Q20E	2035E
Toora	Wind	Victoria, Australia	100%	21	21		2002	NA
SPP	Wind	Queensland, Australia	100%	12	12	avg remain 6	2000	2030E
SPP	Wind	Queensland, Australia	100%	180	180	avg remain 6	Dec-18	2030E
PNPC	Hydro	Laos PDR	25%	410	103	27	2019E	2046E
Riau	Thermal	Laos PDR	49%	296	145	25	2021	2046E
Paiton (Coal)	Thermal	Java, Indonesia	36%	2,045	742	25	2017	2042E
Asahan-1	Hydro	Sumata, Indonesia	48%	180	86	30	2011	2040E
Townsville (SPP)	Combined Cycle	Queensland, Australia	100%	234	234	26	1999	2025E
Kemerton (SPP)	Open Cycle Gas Turbine	Western, Australia	100%	315	315	25	2005	2030E
Coc San	Hydro	Hanoi, Vietnam	58%	30	17	20	2016	2036E
Minh Luong	Hydro	Lao Cai, Vietnam	49%	30	15	20	2018	2038E
Ecowin	Wind	Vietnam	51%	30	15	20	Sep-23	2043E
Starfish Hill	Wind	Australia	100%	33	33		2003	NA
Song Giang 2	Hydro	Vietnam	46%	37	17	20	2014	2034E
Thang Long (IPP)	Coal	Vietnam	22%	620	136	25	2018	2018-43E
Total current projects				17,844	9,307			
RATCH's future projects								
Thungfai	Solar	Lampang (TH)	52%	27	13.95	25		
Solar Farm	Solar	Australia	100%	154	154.00			
Solar Farm	Solar	Philippines	49%	145	71.05			
Bentre	Wind	Vietnam	75%	80	59.60	20		
Song Giang 1	Hydro	Vietnam	46%	12	5.55			
Hydroelctric	Hydro	Laos PDR	60%	355	213.00	27		
Sibundong (SPP)	Hydro	Sumata, Indonesia	50%	74	36.85			
LG2 Battery (ADD)	Battery	Australia	100%	10	10.00			
LG3 Battery	Battery	Australia	100%	100	100.00			
Lincoln Gap 3	Wind	South Australia	100%	252	252	15		NA
Total Future projects				2,609	1,630			
Grant Total				20,453	10,815			

As of 11 Dec-24; Source: RATCH

## Strengthening IPP and renewable energy growth portfolio

RATCH has several new equity capacity growth projects in the pipeline, with a combined capacity of 643MW set to commence CODs in 2025 and an additional 411MW in 2026. In 2025, the projects include the 392MW HKP block 2. Other projects include a 152MW solar farm in Australia, a 71MW NPSI solar farm in the Philippines, the 12MW NNEG extension (Hydro), the 10MW LG2 battery (solar, Australia), and the 5.55MW Song Giang 1 (solar, Vietnam). For 2026, equity capacity growth should come from Lincoln Gap 3, a 252MW wind project in Australia, the 100MW LG3 battery (solar, Australia), and the 59MW Nexif Ben Tre wind project in Indonesia. Over the next five years, RATCH plans to add 1.7GW of capacity, with green projects accounting for 77% of the total. This supports the company's long-term strategy for sustainable growth, with the current renewable energy expected to contribute 27% of total revenue, based on our estimates.

### Exhibit 6: RATCH's capacity growth projects

Projects	Type	Type	Equity capacity (MW)	COD	Locations
Solar Farm	SPP	solar	152	2025E	Thailand
NPSI	SPP	solar	74	2025E	Philippine
LG2	Renewable	Solar+battery	10	2025E	Australia
Song Gieng 1	Renewable	solar	6	2025E	Vietnam
NNEG Extension	SPP	Gas	12	2025E	Thailand
Hin Kong	IPPs	Gas	714	Jan-2025E	Thailand
Nexif Energy Ben Tre	Renewable	Wind	40	2026E	Vietnam
LG3	Renewable	Solar+battery	100	2026E	Australia
Lincoln Gap 3	Renewable	Wind	252	2026E	Australia
Nearshore WF	Renewable	Wind	220	2029E	Philippine
Sibundong	SPP	Hydro	37	2029E	Indonesia
Offshore WF	Renewable	Wind	220	2030E	Philippine
Thugnfaï	Renewable	Solar	14	2030E	Thailand
Sekong 4A&4B	SPP	Hydro	213	2033E	Lao PDR

Source: RATCH

## Expect net profit growth of 13% and 9% in 2025-26

Despite a projected decline in RG's revenue over the next two years before its expiration in 2027, contributions from IPPs and small power producers (SPPs) are expected to provide timely replacements. This would result in a sharp increase in the share of profits from associate companies, potentially reaching THB9.4b in 2025, up 31% y-y. Key projects from HKP block 2 and the 742MW coal-fired Paiton Project will deliver full-year earnings, while RATCH's renewable energy segment is anticipated to deliver mixed earnings results in 2025. Key contributors include a 152MW solar farm in Australia, the 71MW NPSI solar project in the Philippines, the 13MW NNEG Phase 3 expansion, and the LG3 Battery 2-3 project (110MW, solar, Australia).

We project RATCH's net profit for 2024-26 to be THB7b, THB7.9b, and THB8.6b, reflecting growth of 35.8% y-y, 12.8% y-y, and 9.1% y-y, respectively. Key drivers include higher earnings from IPPs. Contributions from the 392MW HKP block 1 starting in March 2024 and the full-year recognition of the Paiton Project starting in April 2024 should drive earnings. This would result in a sharp increase in the share of profits from associate companies, potentially reaching THB7.2b, up 89% y-y in 2024. 2025 net profit growth should primarily be supported by new capacity additions, including the commissioning of HKP block 2, the solar farm project in Australia, and the NPSI project in the Philippines. 2026 earnings should be further bolstered by an additional 411MW of overseas renewable projects and the commencement of the Motorway M6 & M81 projects as well as the Pink Line Expansion project within 2026.

### Exhibit 7: Summary of 3Q24/9M24 operations

	3Q23	2Q24	----- 3Q24 -----			9M23	9M24	Change	2024E
	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(THB m)	(y-y%)	(THB m)
Revenue	9,511	8,244	9,001	9.2	(5.4)	35,773	26,775	(25.2)	35,137
Operating costs	(6,450)	(5,547)	(6,163)	11.1	(4.5)	(27,658)	(18,649)	(32.6)	(25,233)
EBITDA	2,375	1,947	2,145	10.2	(9.7)	6,094	5,962	(2.2)	7,093
<b>EBIT</b>	<b>1,441</b>	<b>903</b>	<b>1,140</b>	<b>26.3</b>	<b>(20.9)</b>	<b>3,280</b>	<b>2,872</b>	<b>(12.5)</b>	<b>2,917</b>
Interest expense	(1,141)	(1,175)	(1,124)	(4.4)	(1.5)	(3,166)	(3,324)	5.0	(4,147)
Interest & invt inc	469.9	325.1	198.1	(39.1)	(57.8)	1,312	957	(27.1)	989
Associates' contrib	550.8	2,331.1	2,034.5	(12.7)	269.4	3,231	5,312	64.4	7,212
Exceptionals	(119)	181	79	(56.3)	(166.8)	(380)	(126)	(66.9)	-
Pretax profit	1,286	2,399	1,750	(27.1)	36.1	5,028	5,766	14.7	8,227
Tax	(301)	(469)	(78)	(83.3)	(74.0)	(647)	(759)	17.3	(890)
<b>Net profit</b>	<b>1,182</b>	<b>2,290</b>	<b>1,658</b>	<b>(27.6)</b>	<b>40.3</b>	<b>4,755</b>	<b>5,485</b>	<b>15.4</b>	<b>7,018</b>
Non-recurring	(6)	(207)	353	(270.1)	(5,683.5)	(123)	38	(131.2)	-
Core net profit	1,057	2,264	2,090	(7.7)	97.8	4,252	5,398	26.9	7,018
EPS (THB)	0.82	1.58	1.14	(27.6)	40.3	3.28	3.78	15.4	3.87
Core EPS (THB)	0.73	1.56	1.44	(7.7)	97.8	2.93	3.72	26.9	3.87

Sources: RATCH; FSSIA estimates

## Exhibit 8: 3Q24/9M24 – key performance

Revenues	3Q24 (THB m)	3Q23 (THB m)	Change (y-y %)	9M24 (THB m)	9M23 (THB m)	Change (y-y %)
Sales	8,369	8,820	(5)	24,803	33,644	(26)
AP (RG)	734	929	(21)	2,306	2,685	(14)
EP (Fuel) - RG	3,062	3,455	(11)	10,137	17,230	(41)
RATCH Cogen (RCO)	722	713	1	2,145	2,404	(11)
RAC	2,319	1,796	29	5,409	5,372	1
CS	57	46	25	154	142	9
RER	598	598	(0)	1,660	1,765	(6)
RPE	828	1,219	(32)	2,820	3,945	(29)
FRD	49	64	(23)	171	101	69
Share of profits from jointly-controlled entities	3Q24 (THB m)	3Q23 (THB m)	Change (y-y %)	9M24 (THB m)	9M23 (THB m)	Change (y-y %)
Paiton	846	-	-	2,413	2,459	(1.85)
HPC	713	407	75	1,338	-	-
HKP	418	(22)	n/a	717	(49)	n/a
SEAN	130	76	71	301	113	n/a
RPCL	61	76	(20)	151	188	(19.84)
RW COGEN	51	51	1	148	148	(0.03)
NNEG	41	68	(40)	125	138	(9.57)
Yandin	20	(11)	n/a	121	58	n/a
RIAU	13	43	(70)	118	31	n/a
Songkha Biomass/Biofuel	11	12	(9)	75	149	(49.51)
Berkprai	7	31	(79)	70	89	(21.91)
PNPC	(168)	10	n/a	29	29	1.94
Others	(108)	(189)	(43)	(293)	(120)	n/a
<b>Total share of profits from jointly-controlled entities</b>	<b>2,034</b>	<b>551</b>	<b>n/a</b>	<b>5,312</b>	<b>3,231</b>	<b>64</b>

Source: RATCH



## Valuation

We reinitiate coverage of RATCH with a BUY call and an SoTP-based TP of THB36. We see RATCH as a near-term recovery play, providing upsides to its share price thanks to its solid capacity growth and its IPP net profit recovery outlook. RATCH is also a long-term power play, in our view, thanks to its continued organic and inorganic capacity growth. In the near term, RATCH's net profit growth should be driven by seasonally strong earnings in 1H25 that will likely continue into 2H25, backed by RATCH's new growth projects commencing their CODs from January 2025 onward.

In the Thai power sector, we prefer RATCH and CK Power (CKP TB, BUY) for IPPs, while we like Global Power Synergy (GPSC TB, BUY) and WHA Utilities and Power (WHAUP TB, HOLD) for SPPs, given their more visible, stronger earnings growth outlooks in 2025-26.

### Exhibit 9: SoTP-based valuation

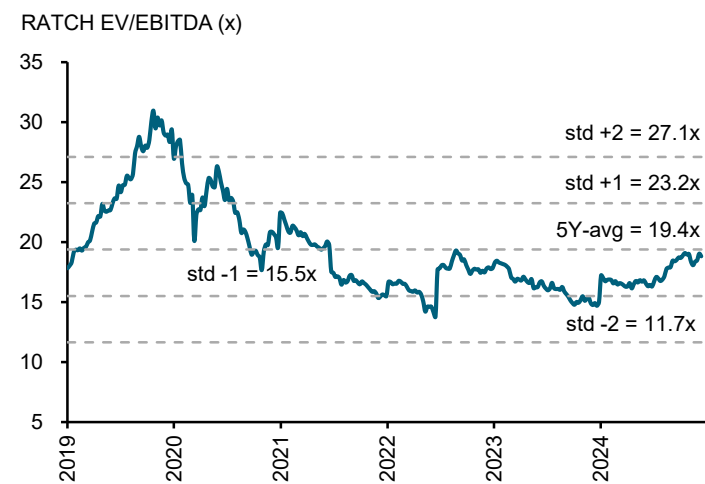
Cost of equity assumptions	(%)	Cost of debt assumptions	(%)
Risk-free rate	3.0	Pretax cost of debt	5.0
Market risk premium	11.0	Marginal tax rate	20.0
Stock beta	1.1		
Cost of equity, $K_e$	15.1	Net cost of debt, $K_d$	4.0
Weight applied	30.0	Weight applied	70.0
<b>WACC (%)</b>	<b>7.3</b>		

DCF valuation estimate	(THB m)	(THB/share)	Comments
Core operating assets	43,976	20.2	WACC 7.3%, Risk-free rate 3%, Risk premium 11%
Investments	84,232	38.7	Estimated value for affiliates post 2024E at 1x P/BV
Cash	7,875	3.6	At end-2024E
Debt	(61,572)	(28.3)	At end-2024E
Minorities	(319)	(0.1)	At end-2024E
<b>Residual ordinary equity</b>	<b>74,192</b>	<b>34.1</b>	
Hin Kong (700MW)	2,724	1.3	Assume EIRR at 13%, COD 2024-25E
New 214 wind farms in Australia (214MW)	1,577	0.7	Assume EIRR at 13%, COD 2025-26E
<b>Target price</b>	<b>83,496</b>	<b>36.1</b>	

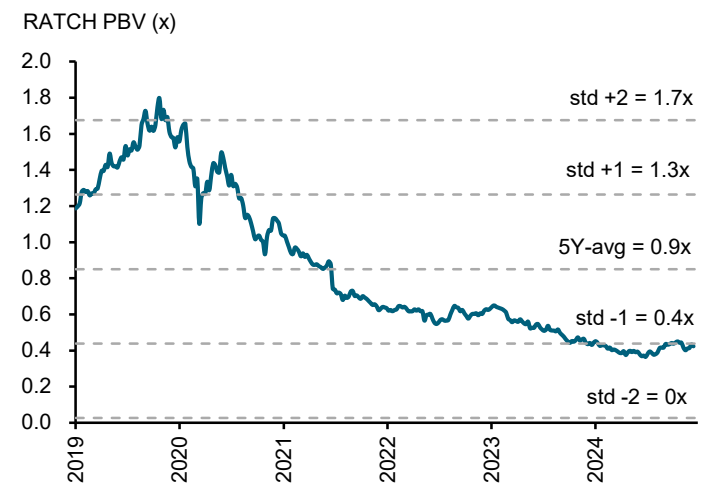
Sources: RATCH; FSSIA estimates

### Exhibit 10: Forward EV/EBITDA



Sources: Bloomberg; FSSIA estimates

### Exhibit 11: Forward P/BV



Sources: Bloomberg; FSSIA estimates



## Exhibit 12: Thailand power sector valuations as of 19 Dec 2024

Company	BBG	Rec	Share	Target	Up	Market Cap	----- PE -----		----- ROE -----		----- PBV -----		- EV/ EBITDA -		-- DivYld --	
			Price (LCY)	price (LCY)	side (%)		24E (x)	25E (x)	24E (%)	25E (%)	24E (x)	25E (x)	24E (x)	25E (x)	24E (x)	25E (x)
Global Power Synergy*	GPSC TB	BUY	40.25	51	27	3,285	24.2	21.1	4.4	4.9	1.0	1.0	10.4	10.1	1.9	2.0
Ratch Group*	RATCH TB	BUY	30.50	36	18	1,920	9.5	8.4	7.0	7.6	0.7	0.6	18.3	20.4	5.6	5.9
CK Power*	CKP TB	BUY	3.10	4.35	40	730	20.8	11.8	4.4	7.5	0.9	0.9	13.4	14.5	3.2	3.2
WHA Utilities and Power*	WHAUP TB	HOLD	4.78	5.30	11	529	13.7	10.5	9.6	12.0	1.3	1.2	21.2	18.6	5.2	5.2
Gulf Energy Development	GULF TB	n/a	58.75	n/a	n/a	19,975	36.8	30.8	14.3	15.1	5.0	4.3	28.5	24.5	1.7	1.8
B Grimm Power	BGRIM TB	n/a	18.80	n/a	n/a	1,420	26.4	21.6	4.1	5.2	1.3	1.2	11.8	11.2	1.8	2.1
BCPG	BCPG TB	n/a	5.20	n/a	n/a	451	5.0	12.5	5.7	3.5	0.5	0.5	10.1	12.0	4.3	4.7
Energy Absolute	EA TB	n/a	3.94	n/a	n/a	633	4.8	7.2	9.6	7.2	0.4	0.5	10.2	12.2	2.0	1.9
Electricity Generating	EGCO TB	n/a	119.50	n/a	n/a	1,823	8.1	7.1	7.2	7.8	0.6	0.5	9.7	11.2	5.2	5.5
Banpu Power	BPP TB	n/a	11.20	n/a	n/a	989	9.9	8.8	6.7	7.2	0.6	0.6	10.6	9.9	5.8	5.8
Gunkul Engineering	GUNKUL TB	n/a	2.24	n/a	n/a	558	11.5	11.2	10.7	11.6	1.3	1.3	8.6	7.8	4.4	4.5
Absolute Clean Energy	ACE TB	n/a	1.29	n/a	n/a	377	14.3	9.9	6.0	7.7	0.8	0.8	9.6	7.3	n/a	n/a
Thailand power sector avg.						32,691	15.4	13.4	7.5	8.1	1.2	1.1	13.5	13.3	3.7	3.9

Sources: Bloomberg; \*FSSIA estimates

## Financial Statements

### Ratch Group

Profit and Loss (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Revenue	75,001	43,976	35,137	34,455	29,287
Cost of goods sold	(69,287)	(37,755)	(29,409)	(29,592)	(24,832)
<b>Gross profit</b>	<b>5,714</b>	<b>6,221</b>	<b>5,728</b>	<b>4,864</b>	<b>4,455</b>
Other operating income	-	-	-	-	-
Operating costs	(2,749)	(3,037)	(2,811)	(2,756)	(2,343)
<b>Operating EBITDA</b>	<b>6,002</b>	<b>7,249</b>	<b>7,093</b>	<b>6,390</b>	<b>6,515</b>
Depreciation	(3,037)	(4,065)	(4,176)	(4,282)	(4,404)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>2,965</b>	<b>3,184</b>	<b>2,917</b>	<b>2,107</b>	<b>2,112</b>
Net financing costs	(2,507)	(2,478)	(2,891)	(3,652)	(3,680)
Associates	5,391	3,815	7,212	9,444	9,727
Recurring non-operating income	6,185	5,634	8,201	10,644	11,377
Non-recurring items	(30)	0	0	0	0
<b>Profit before tax</b>	<b>6,614</b>	<b>6,339</b>	<b>8,227</b>	<b>9,098</b>	<b>9,809</b>
Tax	(937)	(860)	(890)	(860)	(820)
<b>Profit after tax</b>	<b>5,676</b>	<b>5,479</b>	<b>7,337</b>	<b>8,238</b>	<b>8,989</b>
Minority interests	106	(312)	(319)	(319)	(349)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>5,782</b>	<b>5,167</b>	<b>7,018</b>	<b>7,919</b>	<b>8,640</b>
<b>Non-recurring items &amp; goodwill (net)</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Recurring net profit</b>	<b>5,812</b>	<b>5,167</b>	<b>7,018</b>	<b>7,919</b>	<b>8,640</b>
<b>Per share (THB)</b>					
Recurring EPS *	2.67	2.38	3.23	3.64	3.97
Reported EPS	2.66	2.38	3.23	3.64	3.97
DPS	1.60	1.60	1.70	1.80	1.80
Diluted shares (used to calculate per share data)	2,175	2,175	2,175	2,175	2,175
<b>Growth</b>					
Revenue (%)	99.7	(41.4)	(20.1)	(1.9)	(15.0)
Operating EBITDA (%)	28.8	20.8	(2.2)	(9.9)	2.0
Operating EBIT (%)	17.6	7.4	(8.4)	(27.8)	0.2
Recurring EPS (%)	(49.1)	(11.1)	35.8	12.8	9.1
Reported EPS (%)	(50.7)	(10.6)	35.8	12.8	9.1
<b>Operating performance</b>					
Gross margin inc. depreciation (%)	7.6	14.1	16.3	14.1	15.2
Gross margin of key business (%)	11.7	23.4	28.2	26.5	30.2
Operating EBITDA margin (%)	8.0	16.5	20.2	18.5	22.2
Operating EBIT margin (%)	4.0	7.2	8.3	6.1	7.2
Net margin (%)	7.7	11.8	20.0	23.0	29.5
Effective tax rate (%)	76.7	34.1	70.0	16.1	16.1
Dividend payout on recurring profit (%)	59.9	67.3	52.7	49.4	45.3
Interest cover (X)	3.6	3.6	3.8	3.5	3.7
Inventory days	10.6	24.2	31.8	27.2	30.5
Debtor days	49.8	69.9	57.1	60.1	68.9
Creditor days	53.0	97.3	80.9	69.2	77.5
Operating ROIC (%)	4.7	4.2	3.8	2.7	2.8
ROIC (%)	4.6	3.9	4.6	5.0	5.2
ROE (%)	6.9	5.3	7.0	7.6	8.0
ROA (%)	4.0	3.4	4.5	5.2	5.5

\* Pre-exceptional, pre-goodwill and fully diluted

Revenue by Division (THB m)	2022	2023	2024E	2025E	2026E
Domestic electricity generating	66,120	32,401	29,161	26,245	20,099
International power projects	2,456	3,048	3,505	5,698	6,553
Revenue from finance lease contracts	6,174	2,927	1,464	1,610	1,771
Others	251	5,600	1,007	903	864

Sources: Ratch Group; FSSIA estimates

## Financial Statements

### Ratch Group

Cash Flow (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Recurring net profit	5,812	5,167	7,018	7,919	8,640
Depreciation	3,037	4,065	4,176	4,282	4,404
Associates & minorities	5,391	3,815	7,212	9,444	9,727
Other non-cash items	-	-	-	-	-
Change in working capital	(1,115)	(3,769)	596	157	854
<b>Cash flow from operations</b>	<b>13,125</b>	<b>9,279</b>	<b>19,002</b>	<b>21,802</b>	<b>23,624</b>
Capex - maintenance	(3,037)	(4,065)	(4,176)	(4,282)	(4,404)
Capex - new investment	(16,110)	(846)	(330)	(282)	(404)
Net acquisitions & disposals	(10,298)	(2,396)	(20,471)	(5,000)	(5,000)
Other investments (net)	(5,263)	7,169	7,212	9,444	9,727
<b>Cash flow from investing</b>	<b>(34,708)</b>	<b>(138)</b>	<b>(17,765)</b>	<b>(121)</b>	<b>(80)</b>
Dividends paid	(3,252)	(3,251)	(3,480)	(3,915)	(3,915)
Equity finance	0	0	0	0	0
Debt finance	35,564	(8,773)	0	(3,000)	(1,000)
Other financing cash flows	16,650	(12,554)	(11,090)	(10,867)	(10,869)
<b>Cash flow from financing</b>	<b>48,963</b>	<b>(24,578)</b>	<b>(14,570)</b>	<b>(17,782)</b>	<b>(15,784)</b>
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	4,659	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>4,659</b>	<b>(2,355)</b>	<b>(7,136)</b>	<b>(7,428)</b>
<b>Movement in cash</b>	<b>27,380</b>	<b>(10,778)</b>	<b>(15,688)</b>	<b>(3,237)</b>	<b>331</b>
Free cash flow to firm (FCFF)	(18,605.82)	13,583.32	5,383.77	25,727.01	27,455.38
Free cash flow to equity (FCFE)	30,631.65	(7,527.90)	(12,208.35)	678.04	4,246.47
<b>Per share (THB)</b>					
FCFF per share	(8.55)	6.25	2.48	11.83	12.62
FCFE per share	14.08	(3.46)	(5.61)	0.31	1.95
Recurring cash flow per share	6.55	6.00	8.46	9.95	10.47
<b>Balance Sheet (THB m) Year Ending Dec</b>					
Tangible fixed assets (gross)	73,608	73,608	75,608	78,608	81,608
Less: Accumulated depreciation	(21,270)	(21,270)	(24,446)	(27,729)	(31,132)
<b>Tangible fixed assets (net)</b>	<b>52,338</b>	<b>52,338</b>	<b>51,161</b>	<b>50,879</b>	<b>50,476</b>
<b>Intangible fixed assets (net)</b>	<b>19,515</b>	<b>19,267</b>	<b>19,267</b>	<b>19,267</b>	<b>19,267</b>
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	61,365	63,761	84,232	89,232	94,232
Cash & equivalents	34,341	23,563	7,875	4,638	4,969
A/C receivable	11,518	5,324	5,676	5,676	5,383
Inventories	1,946	2,513	1,883	1,888	1,524
Other current assets	7,680	10,217	8,164	8,005	6,805
<b>Current assets</b>	<b>55,484</b>	<b>41,618</b>	<b>23,597</b>	<b>20,207</b>	<b>18,681</b>
Other assets	40,876	37,341	37,341	37,341	37,341
<b>Total assets</b>	<b>229,578</b>	<b>214,325</b>	<b>215,598</b>	<b>216,926</b>	<b>219,997</b>
Common equity	98,029	97,997	101,535	105,539	110,264
Minorities etc.	9,375	9,136	9,455	9,774	10,123
<b>Total shareholders' equity</b>	<b>107,403</b>	<b>107,133</b>	<b>110,990</b>	<b>115,313</b>	<b>120,388</b>
Long term debt	55,080	35,497	35,497	32,497	31,497
Other long-term liabilities	37,922	37,722	37,722	37,722	37,722
<b>Long-term liabilities</b>	<b>93,002</b>	<b>73,218</b>	<b>73,218</b>	<b>70,218</b>	<b>69,218</b>
A/C payable	11,577	6,393	4,788	4,803	3,876
Short term debt	15,265	26,075	26,075	26,075	26,075
Other current liabilities	2,331	1,505	527	516	439
<b>Current liabilities</b>	<b>29,173</b>	<b>33,973</b>	<b>31,390</b>	<b>31,394</b>	<b>30,391</b>
<b>Total liabilities and shareholders' equity</b>	<b>229,578</b>	<b>214,325</b>	<b>215,598</b>	<b>216,926</b>	<b>219,997</b>
Net working capital	7,235	10,157	10,407	10,250	9,396
Invested capital	181,329	182,864	202,409	206,969	210,712
* Includes convertibles and preferred stock which is being treated as debt					
<b>Per share (THB)</b>					
Book value per share	45.07	45.06	46.68	48.52	50.70
Tangible book value per share	36.10	36.20	37.82	39.67	41.84
<b>Financial strength</b>					
Net debt/equity (%)	33.5	35.5	48.4	46.8	43.7
Net debt/total assets (%)	15.7	17.7	24.9	24.9	23.9
Current ratio (x)	1.9	1.2	0.8	0.6	0.6
CF interest cover (x)	19.6	(1.7)	(3.1)	1.3	2.3
<b>Valuation</b>					
<b>Recurring P/E (x) *</b>	<b>11.4</b>	<b>12.8</b>	<b>9.5</b>	<b>8.4</b>	<b>7.7</b>
<b>Recurring P/E @ target price (x) *</b>	<b>13.5</b>	<b>15.2</b>	<b>11.2</b>	<b>9.9</b>	<b>9.1</b>
Reported P/E (x)	11.5	12.8	9.5	8.4	7.7
Dividend yield (%)	5.2	5.2	5.6	5.9	5.9
Price/book (x)	0.7	0.7	0.7	0.6	0.6
Price/tangible book (x)	0.8	0.8	0.8	0.8	0.7
EV/EBITDA (x) **	18.6	15.7	18.3	20.4	19.8
EV/EBITDA @ target price (x) **	20.6	17.3	19.9	22.2	21.6
EV/invested capital (x)	0.6	0.6	0.6	0.6	0.6
* Pre-exceptional, pre-goodwill and fully diluted    ** EBITDA includes associate income and recurring non-operating income					

Sources: Ratch Group; FSSIA estimates

# RATCH Group PCL (RATCH TB)

## FSSIA ESG rating


**64.27 / 100**

### Exhibit 13: FSSIA ESG score implication

Rating	Score	Implication
★★★★★	>79-100	Leading its industry peers in managing the most significant ESG risks which not only better cost efficiency but also lead to higher profitability.
★★★★★	>59-79	<b>A mixed track record of managing the most significant ESG risks and opportunities relative to industry peers.</b>
★★★★	>39-59	Relevant ESG materiality matrix has been constructively addressed, well-managed and incorporated into day-to-day operations, in which targets and achievements are evaluated annually.
★★★	>19-39	Relevant ESG materiality matrix has been identified with key management in charge for progress to be followed up on and to provide intensive disclosure. Most targets are conventional and achievable.
★	1-19	The company has adopted the United Nations Sustainable Development Goals (UN SDGs), established sustainability management guidelines and fully complies with regulations or ESG suggested guidance from related organizations such as the SET and SEC.

Sources: FSSIA estimates

### Exhibit 14: ESG – peer comparison

	FSSIA ESG score	Domestic ratings						Global ratings						Bloomberg	
		DJSI	SET ESG	SET ESG Rating	CG score	AGM level	Thai CAC	Morningstar ESG risk	ESG Book	MSCI	Moody's	Refinitiv	S&P Global	ESG score	Disclosure score
SET100	67.71	5.69	4.38	4.05	4.77	4.43	4.02	Medium	57.34	BBB	22.70	60.82	67.31	1.19	35.34
Coverage	66.17	5.16	4.33	3.94	4.81	4.43	3.83	Medium	56.41	BBB	18.92	59.20	65.82	1.38	35.46
BCPG	62.74	--	Y	AA	5.00	5.00	Certified	Medium	61.24	A	--	55.65	31.00	--	59.11
BGRIM	65.91	--	Y	AAA	5.00	5.00	Certified	High	62.27	BBB	--	54.54	84.00	--	73.28
GULF	59.23	--	Y	AA	5.00	5.00	Certified	High	58.96	B	--	53.88	66.00	--	62.42
GPSC	71.89	Y	Y	AA	5.00	5.00	Certified	Medium	64.56	B	--	54.57	86.00	--	--
RATCH	64.27	--	Y	AA	5.00	5.00	Certified	High	56.12	BB	--	55.73	62.00	4.79	72.90

Sources: [SETTRADE.com](https://www.settrade.com); FSSIA's compilation

### Exhibit 15: ESG score by Bloomberg

FY ending Dec 31	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
<b>ESG financial materiality scores - ESG score</b>	<b>3.93</b>	<b>4.45</b>	<b>4.35</b>	<b>4.84</b>	<b>4.60</b>	<b>4.45</b>	<b>4.79</b>	<b>4.79</b>
BESG environmental pillar score	2.96	3.78	3.03	4.13	3.61	3.21	3.67	3.90
BESG social pillar score	4.21	4.64	5.90	5.75	5.75	5.75	5.75	5.38
BESG governance pillar score	5.45	5.48	5.30	5.18	5.25	5.47	5.90	5.81
<b>ESG disclosure score</b>	<b>63.62</b>	<b>63.62</b>	<b>67.00</b>	<b>67.42</b>	<b>68.23</b>	<b>70.21</b>	<b>68.59</b>	<b>72.90</b>
Environmental disclosure score	58.53	58.53	61.91	62.58	64.00	69.95	65.09	78.62
Social disclosure score	42.35	42.35	49.12	49.73	50.76	50.76	50.76	50.15
Governance disclosure score	89.86	89.86	89.86	89.86	89.86	89.86	89.86	89.86
<b>Environmental</b>								
Emissions reduction initiatives	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate change policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Climate change opportunities discussed	No	No	No	Yes	Yes	No	No	No
Risks of climate change discussed	No	No	No	Yes	Yes	Yes	Yes	Yes
GHG scope 1	14,109	8,093	6,936	5,875	6,259	6,412	8,516	4,984
GHG scope 2 location-based	39	37	34	44	27	39	31	28
GHG Scope 3	—	—	—	—	3	2,662	3,113	1,549
Carbon per unit of production	0	0	0	0	0	0	0	0
Biodiversity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Energy efficiency policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Total energy consumption	47,943	48,000	41,767	35,690	37,689	20,667	26,666	14,532
Renewable energy use	—	—	—	—	—	0	—	—
Electricity used	65	62	55	69	48	73	71	77
Fuel used - natural gas	7,462,580	4,578,520	4,008,940	3,423,600	3,616,110	3,439,980	4,224,940	2,482,650

Sources: Bloomberg; FSSIA's compilation

**Exhibit 16: ESG score by Bloomberg (cont.)**

FY ending Dec 31	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Fuel used - crude oil/diesel	No	No	No	No	No	No	No	No
Waste reduction policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hazardous waste	1	1	0	0	0	0	0	1
Total waste	8	7	3	19	4	5	31	32
Waste recycled	6	5	3	18	4	5	6	5
Waste sent to landfills	0	0	0	0	0	0	0	1
Environmental supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water consumption	—	—	15,720	13,020	13,730	13,640	18,590	11,930
<b>Social</b>								
Human rights policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Policy against child labor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quality assurance and recall policy	No	No	No	No	Yes	Yes	Yes	Yes
Consumer data protection policy	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	No	No	No	No	No	No
Pct women in workforce	33	33	33	33	34	34	32	32
Pct disabled in workforce	—	—	—	—	—	—	—	—
Business ethics policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anti-bribery ethics policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health and safety policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lost time incident rate - employees	0	0	0	0	0	0	0	0
Total recordable incident rate - employees	1	0	0	0	0	0	0	0
Training policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fair remuneration policy	No	No	No	No	No	No	No	No
Number of employees – CSR	439	445	453	462	468	474	520	565
Employee turnover pct	8	14	6	7	13	5	5	5
Total hours spent by firm - employee training	10,820	19,129	21,291	17,001	12,170	11,139	15,600	22,385
Social supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Governance</b>								
<b>Board size</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>10</b>
<b>No. of independent directors (ID)</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
No. of women on board	2	2	2	1	2	3	3	2
No. of non-executive directors on board	12	12	12	11	11	11	11	9
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	13	12	14	12	12	13	14	13
Board meeting attendance pct	96	94	97	97	99	100	100	100
Board duration (years)	3	3	3	3	3	3	3	3
Director share ownership guidelines	No	No	No	No	No	No	No	No
Age of the youngest director	46	57	55	54	53	54	45	46
Age of the oldest director	66	67	69	70	71	70	71	70
<b>No. of executives / company managers</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>10</b>	<b>10</b>	<b>16</b>
No. of female executives	5	5	5	6	7	6	6	6
Executive share ownership guidelines	No	No	No	No	No	No	No	No
<b>Size of audit committee</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
No. of ID on audit committee	3	3	3	3	3	3	3	3
Audit committee meetings	7	9	7	7	6	8	6	6
Audit meeting attendance %	95	94	100	100	100	100	100	100
<b>Size of compensation committee</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
No. of ID on compensation committee	0	0	0	1	2	2	2	2
No. of compensation committee meetings	8	9	8	9	11	9	9	11
Compensation meeting attendance %	100	96	100	100	100	100	100	100
<b>Size of nomination committee</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
No. of nomination committee meetings	8	9	8	9	11	9	9	11
Nomination meeting attendance %	100	96	100	100	100	100	100	100
<b>Sustainability governance</b>								
Verification type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sources: Bloomberg; FSSIA's compilation

## Disclaimer for ESG scoring

ESG score	Methodology	Rating																			
The Dow Jones Sustainability Indices ( <a href="#">DJSI</a> ) By S&P Global	The DJSI World applies a transparent, rules-based component selection process based on the companies' Total Sustainability Scores resulting from the annual S&P Global Corporate Sustainability Assessment (CSA). Only the top-ranked companies within each industry are selected for inclusion.	Be a member and invited to the annual S&P Global Corporate Sustainability Assessment (CSA) for DJSI. Companies with an S&P Global ESG Score of less than 45% of the S&P Global ESG Score of the highest scoring company are disqualified. The constituents of the DJSI indices are selected from the Eligible Universe.																			
SET ESG Ratings List ( <a href="#">SETESG</a> ) by The Stock Exchange of Thailand ( <a href="#">SET</a> )	SET ESG quantifies responsibility in Environmental and Social issues by managing business with transparency in Governance, updated annually. Candidates must pass the preemptive criteria, with two crucial conditions: 1) no irregular trading of the board members and executives; and 2) free float of >150 shareholders, and combined holding must be >15% of paid-up capital. Some key disqualifying criteria include: 1) CG score of below 70%; 2) independent directors and free float violation; 3) executives' wrongdoing related to CG, social & environmental impacts; 4) equity in negative territory; and 5) earnings in red for > 3 years in the last 5 years.	To be eligible for <b>SETESG inclusion</b> , verified data must be scored at a minimum of 50% for each indicator, unless the company is a part of DJSI during the assessment year. The scoring will be fairly weighted against the nature of the relevant industry and materiality. <b>SETESG Index</b> is extended from the SET ESG Ratings companies whose 1) market capitalization > THB5b (~USD150b); 2) free float >20%; and 3) liquidity >0.5% of paid-up capital for at least 9 out of 12 months. The SETTHSI Index is a market capitalisation-weighted index, cap 5% quarterly weight at maximum, and no cap for number of stocks.																			
<b>CG Score</b> by Thai Institute of Directors Association (Thai IOD)	An indicator of CG strength in sustainable development, measured annually by the Thai IOD, with support from the Stock Exchange of Thailand (SET). The results are from the perspective of a third party, not an evaluation of operations.	Scores are rated in six categories: 5 for Excellent (90-100), 4 for Very Good (80-89), 3 for Good (70-79), 2 for Fair (60-69), 1 for Pass (60-69), and not rated for scores below 50. Weightings include: 1) the rights; 2) and equitable treatment of shareholders (weight 25% combined); 3) the role of stakeholders (25%); 4) disclosure & transparency (15%); and 5) board responsibilities (35%).																			
<b>AGM level</b> By Thai Investors Association (TIA) with support from the SEC	It quantifies the extent to which shareholders' rights and equitable treatment are incorporated into business operations and information is transparent and sufficiently disclosed. All form important elements of two out of five the CG components to be evaluated annually. The assessment criteria cover AGM procedures before the meeting (45%), at the meeting date (45%), and after the meeting (10%). <i>(The first assesses 1) advance circulation of sufficient information for voting; and 2) facilitating how voting rights can be exercised. The second assesses 1) the ease of attending meetings; 2) transparency and verifiability; and 3) openness for Q&amp;A. The third involves the meeting minutes that should contain discussion issues, resolutions and voting results.)</i>	The scores are classified into four categories: 5 for Excellent (100), 4 for Very Good (90-99), 3 for Fair (80-89), and not rated for scores below 79.																			
<a href="#">Thai CAC</a> By Thai Private Sector Collective Action Against Corruption (CAC)	The core elements of the Checklist include corruption risk assessment, establishment of key controls, and the monitoring and developing of policies. The Certification is good for three years. <i>(Companies deciding to become a CAC certified member start by submitting a Declaration of Intent to kick off an 18-month deadline to submit the CAC Checklist for Certification, including risk assessment, in place of policy and control, training of managers and employees, establishment of whistleblowing channels, and communication of policies to all stakeholders.)</i>	The document will be reviewed by a committee of nine professionals. A passed Checklist will move for granting certification by the CAC Council approvals whose members are twelve highly respected individuals in professionalism and ethical achievements.																			
<a href="#">Morningstar Sustainabilitys</a>	The Sustainabilitys' ESG risk rating provides an overall company score based on an assessment of how much of a company's exposure to ESG risk is unmanaged. <i>Sources to be reviewed include corporate publications and regulatory filings, news and other media, NGO reports/websites, multi-sector information, company feedback, ESG controversies, issuer feedback on draft ESG reports, and quality &amp; peer reviews.</i>	A company's ESG risk rating score is the sum of unmanaged risk. The more risk is unmanaged, the higher ESG risk is scored. <table><tr><th>NEGL</th><th>Low</th><th>Medium</th><th>High</th><th>Severe</th></tr><tr><td>0-10</td><td>10-20</td><td>20-30</td><td>30-40</td><td>40+</td></tr></table>	NEGL	Low	Medium	High	Severe	0-10	10-20	20-30	30-40	40+									
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0-10	10-20	20-30	30-40	40+																	
<a href="#">ESG Book</a>	The ESG score identifies sustainable companies that are better positioned to outperform over the long term. The methodology considers the principle of financial materiality including information that significantly helps explain future risk-adjusted performance. Materiality is applied by over-weighting features with higher materiality and rebalancing these weights on a rolling quarterly basis.	The total ESG score is calculated as a weighted sum of the features scores using materiality-based weights. The score is scaled between 0 and 100 with higher scores indicating better performance.																			
<a href="#">MSCI</a>	MSCI ESG ratings aim to measure a company's management of financially relevant ESG risks and opportunities. It uses a rules-based methodology to identify industry leaders and laggards according to their exposure to ESG risks and how well they manage those risks relative to peers. <table><tr><td><b>AAA</b></td><td>8.571-10.000</td><td rowspan="3"><b>Leader:</b></td><td rowspan="3">leading its industry in managing the most significant ESG risks and opportunities</td></tr><tr><td><b>AA</b></td><td>7.143-8.570</td></tr><tr><td><b>A</b></td><td>5.714-7.142</td></tr><tr><td><b>BBB</b></td><td>4.286-5.713</td><td rowspan="3"><b>Average:</b></td><td rowspan="3">a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers</td></tr><tr><td><b>BB</b></td><td>2.857-4.285</td></tr><tr><td><b>B</b></td><td>1.429-2.856</td></tr><tr><td><b>CCC</b></td><td>0.000-1.428</td><td><b>Laggard:</b></td><td>lagging its industry based on its high exposure and failure to manage significant ESG risks</td></tr></table>	<b>AAA</b>	8.571-10.000	<b>Leader:</b>	leading its industry in managing the most significant ESG risks and opportunities	<b>AA</b>	7.143-8.570	<b>A</b>	5.714-7.142	<b>BBB</b>	4.286-5.713	<b>Average:</b>	a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers	<b>BB</b>	2.857-4.285	<b>B</b>	1.429-2.856	<b>CCC</b>	0.000-1.428	<b>Laggard:</b>	lagging its industry based on its high exposure and failure to manage significant ESG risks
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<a href="#">Moody's ESG solutions</a>	Moody's assesses the degree to which companies take into account ESG objectives in the definition and implementation of their strategy policies. It believes that a company integrating ESG factors into its business model and relatively outperforming its peers is better positioned to mitigate risks and create sustainable value for shareholders over the medium to long term.																				
<a href="#">Refinitiv ESG rating</a>	Designed to transparently and objectively measure a company's relative ESG performance, commitment and effectiveness across 10 main themes, based on publicly available and auditable data. The score ranges from 0 to 100 on relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly. <i>(Score ratings are 0 to 25 = poor; &gt;25 to 50 = satisfactory; &gt;50 to 75 = good; and &gt;75 to 100 = excellent.)</i>																				
<a href="#">S&amp;P Global</a>	The S&P Global ESG Score is a relative score measuring a company's performance on and management of ESG risks, opportunities, and impacts compared to its peers within the same industry classification. The score ranges from 0 to 100.																				
<b>Bloomberg</b>	ESG Score	Bloomberg score evaluating the company's aggregated Environmental, Social and Governance (ESG) performance. The score is based on Bloomberg's view of ESG financial materiality. The score is a weighted generalized mean (power mean) of Pillar Scores, where the weights are determined by the pillar priority ranking. Values range from 0 to 10; 10 is the best.																			
Bloomberg	ESG Disclosure Score	Disclosure of a company's ESG used for Bloomberg ESG score. The score ranges from 0 for none to 100 for disclosure of every data point, measuring the amount of ESG data reported publicly, and not the performance on any data point.																			

**Rating** regarding the sustainable development of Thai listed companies, both on the SET and MAI, are publicly available on the website of the Securities and Exchange Commission of Thailand (SEC). Currently, ratings available are 1) "**CG Score**"; 2) "**AGM Level**"; 3) "**Thai CAC**"; and 4) **THSI**. The ratings are updated on an annual basis. FSSIA does not confirm nor certify the accuracy of such ratings.

Source: FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Songklod Wongchai FSS International Investment Advisory Securities Co., Ltd

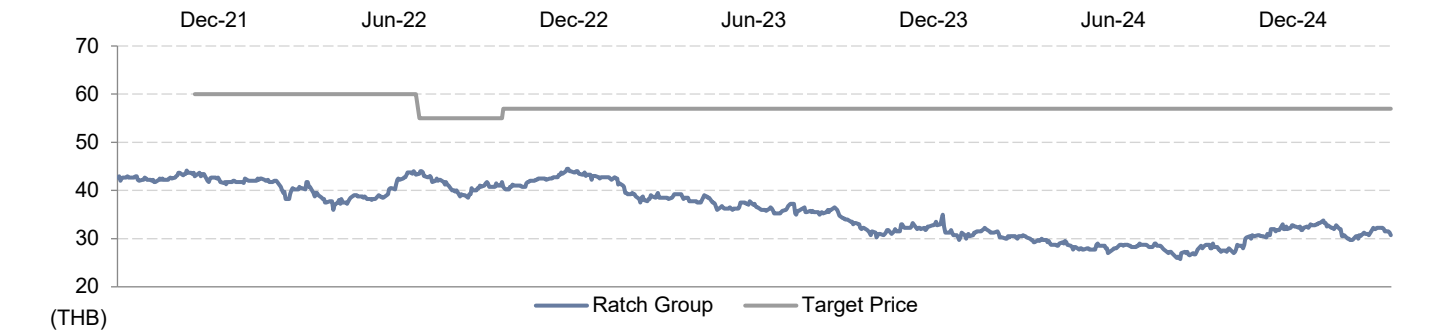
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

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History of change in investment rating and/or target price

Ratch Group (RATCH TB)



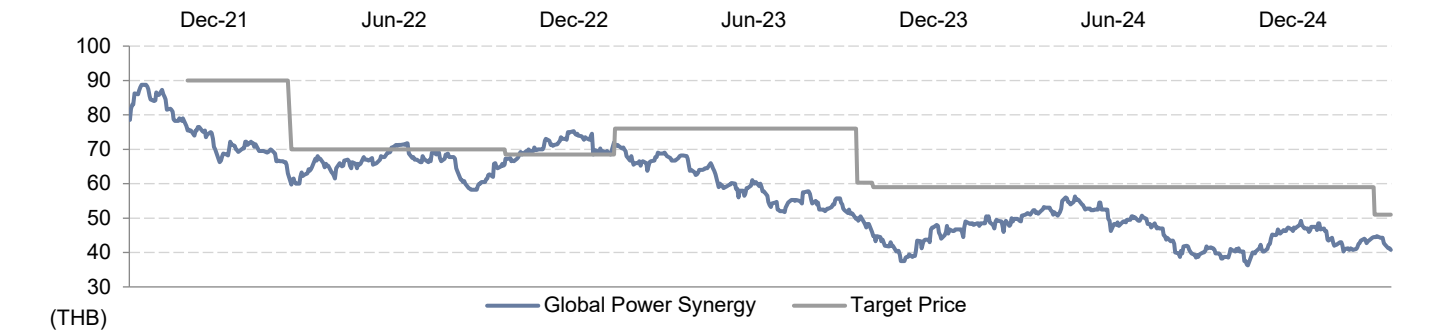
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
23-Feb-2022	BUY	60.00	02-Sep-2022	BUY	55.00	15-Nov-2022	BUY	57.00

FSSIA Research Team started covering this stock from 20-Dec-2024

Price and TP are in local currency

Source: FSSIA estimates

Global Power Synergy (GPSC TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
07-Feb-2022	BUY	90.00	13-Feb-2023	BUY	76.00	03-Dec-2024	BUY	51.00
06-May-2022	HOLD	70.00	11-Sep-2023	BUY	60.30			
10-Nov-2022	HOLD	68.50	25-Sep-2023	BUY	59.00			

Songklod Wongchai started covering this stock from 03-Dec-2024

Price and TP are in local currency

Source: FSSIA estimates



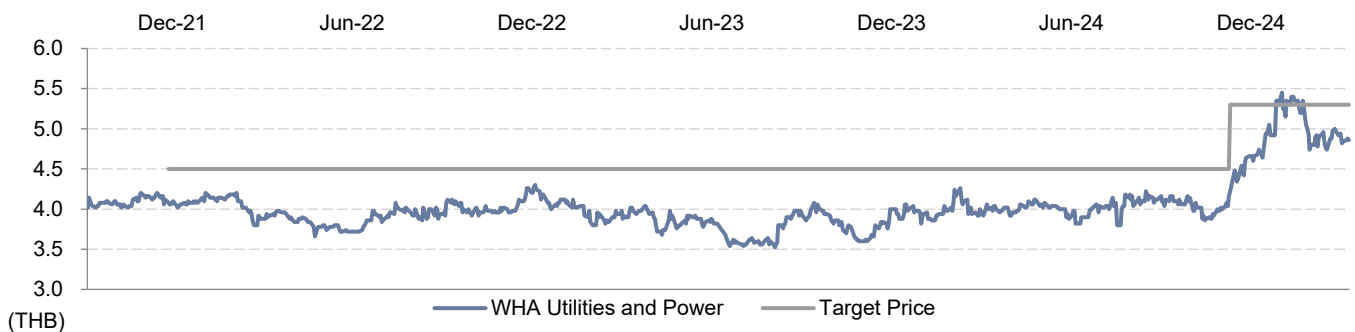
**CK Power (CKP TB)**

Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
22-Feb-2022	BUY	6.60	07-Jun-2024	BUY	4.40	-	-	-
11-Nov-2022	BUY	6.50	20-Sep-2024	BUY	4.35	-	-	-

Songklod Wongchai started covering this stock from 07-Jun-2024

Price and TP are in local currency

Source: FSSIA estimates

**WHA Utilities and Power (WHAUP TB)**

Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
25-Feb-2022	HOLD	4.50	05-Sep-2024	BUY	5.30	-	-	-
19-May-2022	BUY	4.50	31-Oct-2024	HOLD	5.30	-	-	-

Songklod Wongchai started covering this stock from 05-Sep-2024

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Ratch Group	RATCH TB	THB 30.50	BUY	The downside risks to our SoTP-based TP include 1) lower-than-expected demand for electricity in Thailand; 2) lower crude prices; and 3) delays in starting new projects.
Global Power Synergy	GPSC TB	THB 40.25	BUY	The downside risks to our SoTP-based TP on GPSC include 1) lower-than-expected demand for electricity in Thailand; 2) higher-than-expected energy prices (i.e. coal and gas); and 3) lower-than-expected demand from industrial users.
CK Power	CKP TB	THB 3.10	BUY	The downside risks to our SoTP-based TP include lower-than-expected demand for electricity in Thailand and a lower-than-expected water supply for hydro projects.
WHA Utilities & Power	WHAUP TB	THB 4.78	HOLD	The downside risks to our SoTP-based TP include higher gas prices with lower electricity tariffs, pressured by government policies, resulting in significantly lower power margins. And upside risk to expanding new customer base from WHA industrial estates' expansion outlook, rising in water supply and electricity demand from factories in industrial estates, signing contracts to sell water to new customers, and higher water charges.

Source: FSSIA estimates

**Additional Disclosures**

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited.

All share prices are as at market close on 19-Dec-2024 unless otherwise stated.

## RECOMMENDATION STRUCTURE

### Stock ratings

Stock ratings are based on absolute upside or downside, which we define as  $(\text{target price}^* - \text{current price}) / \text{current price}$ .

**BUY (B).** The upside is 10% or more.

**HOLD (H).** The upside or downside is less than 10%.

**REDUCE (R).** The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

\* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

### Industry Recommendations

**Overweight.** The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

**Neutral.** The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

**Underweight.** The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

### Country (Strategy) Recommendations

**Overweight (O).** Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Neutral (N).** Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Underweight (U).** Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.