EQUITY RESEARCH - COMPANY REPORT



FSSIA ESG rating



GLOBAL POWER SYNERGY

GPSC TB

THAILAND / UTILITIES

HOLD

FROM BUY

Tariff reduction risk Disrupts Power

- Regulatory risks would continue to pressure tariff reductions in 2025-26, weighting on earnings despite easing gas costs, as tariff declines outpace gas cost reductions.
- We have cut our 2024-26E by 13-45% to reflect a lower tariff assumption.
- Slash our TP to THB30, leading to a downgrade to HOLD due to limited upside.

Regulatory risks spoil the outlook

We expect GPSC's 2025-26 earnings to face pressure from potential tariff cuts, driven by the government's policy to lower electricity tariffs to THB2-3/kWh, down from the current THB4.15/kWh, to reduce the cost of living and enhance market competitiveness. It would result in a weaker margin for SPPs, whose profit accounts for 76% of the gross profit. Moreover, the expected IPP earnings, particularly from Gheco-One's coal-fired power plant, despite coal costs returning to normal levels and GLOW IPP resuming regular operations, are unlikely to offset the negative impact fully. However, GPSC continues to expand its renewable capacity overseas. Additionally, the government is promoting policies and legislation to support direct PPAs, TPAs, and UGT initiatives, aiming to position Thailand as a regional AI data center hub. We believe these factors will serve as new growth drivers for the Thai power sector.

2024-26E earnings cut to reflect a lower tariff assumption

We have slashed our 2024-26E net profit by 13%/31%/45% to THB4b in 2024 (+11% y-y), THB3.7b in 2025 (-9.4% y-y), and THB3.6b in 2026 (-3.2% y-y). It reflects our lower 2025-26 tariff assumptions, now at THB3.76/kWh in 2025 and THB3.57/kWh in 2026, down from our previous THB4.15/kWh estimate. While these rates remain above the government's policy target of THB 2-3/kWh, we believe achieving this target will be challenging due to its lower-than-base tariff under existing PPAs. Any further reduction would likely require PPA renewals, which we believe would cause even more disruptions to power producers.

Expect 4Q24 earnings recovery q-q

We expect GPSC to report a net profit of THB1b in 4Q24, representing a +34.5% q-q increase, driven by lower fuel prices and a +116% y-y surge from the low base last year. While the Ft rate remained stable, SPP margins should improve. Hence, earnings should benefit from a higher share of profits from CFXD, which is now fully operating, and lower coal costs for GHECO-One. Additionally, the Baht's depreciation should result in only a minimal FX loss in 4Q24, compared to a significant FX loss in 3Q24.

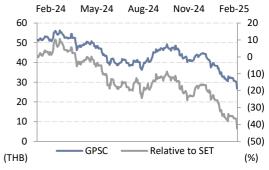
The stock hasn't fully priced in tariff concerns

Given our lower 2024-26E earnings, leading to a lower TP of THB30, we downgrade GPSC to HOLD due to limited upside potential, a lack of positive catalysts, and tariff concerns, which the share price has not priced in fully.

TARGET PRICE	THB30.00
CLOSE	THB26.75
UP/DOWNSIDE	+12.1%
PRIOR TP	THB51.00
CHANGE IN TP	-41.2%
TP vs CONSENSUS	-32.5%

KEY STOCK DATA

YE Dec (THB m)	2023	2024E	2025E	2026E
Revenue	90,303	88,432	79,219	77,611
Net profit	3,694	4,097	3,714	3,594
EPS (THB)	1.31	1.45	1.32	1.27
vs Consensus (%)	-	(3.1)	(28.9)	(39.9)
EBITDA	18,639	21,391	18,023	18,846
Recurring net profit	3,694	4,097	3,714	3,594
Core EPS (THB)	1.31	1.45	1.32	1.27
Chg. In EPS est. (%)	-	(12.7)	(31.1)	(45.5)
EPS growth (%)	32.9	10.9	(9.4)	(3.2)
Core P/E (x)	20.4	18.4	20.3	21.0
Dividend yield (%)	2.8	2.8	3.0	3.4
EV/EBITDA (x)	10.7	8.2	9.3	9.3
Price/book (x)	0.7	0.7	0.7	0.7
Net debt/Equity (%)	95.7	73.8	63.5	68.6
ROE (%)	3.5	3.8	3.4	3.3



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(21.9)	(36.7)	(47.8)
Relative to country (%)	(15.1)	(26.4)	(42.2)
Mkt cap (USD m)			2,233
3m avg. daily turnover (USD m)			8.8
Free float (%)			25
Major shareholder		PTT	Plc (47%)
12m high/low (THB)		5	6.50/26.75
Issued shares (m)			2,819.73

Sources: Bloomberg consensus; FSSIA estimates



Songklod Wongchai

Fundamental Investment Analyst on Securities; License no. 018086 songklod.won@fssia.com, +66 2646 9970

Investment thesis

We see GPSC as a leader in renewable power, given its renewable proportion target of 65% by 2030. It had an electricity-generating equity capacity of 6.85GW as of 3Q24 and has solid expansion plans to increase its committed capacity to 11.8GW. The company's financial performance in 2025-26 should see support from energy price normalization, a profit turnaround of its flagship solar business in India, Avaada Energy Private Limited (AEPL), the COD of its wind farm in Taiwan, Changfang and Xidao (CFXD), and other expansion projects in the pipeline.

Established as a power investment arm of the PTT Group, GPSC has long leveraged its solid ties with the group to expand its electricity generation capacity growth and capture domestic and international opportunities. Currently, GPSC generates electricity mainly from natural gas (52%), and most of its capacity is aimed at supporting PTT Group companies, given GSPC's shareholding structure, with a 75% stake owned by the PTT Group.

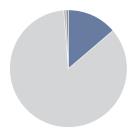
Company profile

GPSC is a flagship power company of the PTT Group and one of the largest power producers in Thailand. Its business portfolio includes gas-fired power plants, coalfired power plants, renewables, and battery business. The company has footprints in Thailand, Laos, India, Taiwan, and China.

www.gpscgroup.com

Principal activities (revenue, 2023)

- Independent power producer -13.7 %
- Small power producer 85.0 %
- Very small power producer 0.6 %
- Others 0.7 %



Source: Global Power Synergy

Major shareholders

- PTT Plc 47.3 %
- PTTGC Plc 10.0 %
- TOP Plc 10.0 %
- Others 32.7 %



Source: Global Power Synergy

Catalysts

Key potential catalysts are 1) falling energy prices (i.e., gas and coal); 2) a higher Ft; 3) new M&As; 4) the resumption of operations at the GHECO-One power plant; 5) AEPL's operations meeting the company's targets and potentially winning renewable bids in India; and 6) a high potential to win new capacity in the renewable bidding phase 2.1 of around 250MW.

Risks to our call

Upside risks to our SoTP-based TP include 1) higher-thanexpected Ft; 2) faster MW expansion; and 3) lower interest rates. Downside risks to our SoTP-based TP 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.

Event calendar

Date	Event
17 Feb 2025	4Q24 results announcement

Key assumptions

	2022	2023	2024E	2025E	2026E
IPP gas price (THB/mmbtu)	465	460	358	331	336
SPP gas price (THB/mmbtu)	478	430	345	320	320
Coal price (USD/tonne)	192	210	150	100	100
Ft (THB/kWh)	0.40	1.04	0.60	0.20	0.20
Regular Tariff (THB/kWh)	4.50	3.99	4.18	3.76	3.57

Source: FSSIA estimates

Earnings sensitivity

- For every THB1/mmbtu increase in gas price, we estimate 2024 earnings would decline by THB25m and vice versa, all else being equal.
- For every THB0.01/kWh increase in the fuel tariff, we estimate 2024 earnings would increase by THB50m and vice versa, all else being equal.

Source: FSSIA estimates

Exhibit 1: GPSC's quarterly results preview

	3Q23	4Q23	1Q24	2Q24	3Q24			
	(THB m)	(q-q%)	(y-y%)					
Revenue	21,044	18,319	23,773	23,877	20,912	19,870	(5.0)	8.5
Operating costs	(17,336)	(16,398)	(20,996)	(20,716)	(18,166)	(17,066)	(6.1)	4.1
EBIT	3,101	952	2,267	2,653	2,212	2,190	(1.0)	130.1
Interest expense	(1,359)	(1,353)	(1,401)	(1,558)	(1,454)	(1,451)	(0.2)	7.2
Other income	400	588	500	1,625	1,064	930	(12.6)	58.1
Associates' contribution	496	223	(12)	(24)	29	86	196.9	(61.4)
Pretax profit	2,607	1,001	1,195	1,518	914	1,185	29.7	18.3
Tax	(500)	(134)	(135)	96	(12)	(11)	(8.6)	(92.1)
Tax rate (%)	(65)	(64)	(66)	(65)	(64)	(63)	(1.6)	(1.6)
Minority interests	(318)	(389)	(196)	(186)	(133)	(140)	5.3	(64.1)
Net profit	1,790	478	864	1,429	770	1,035	34.5	116.6
Non recurring	171	133	45	11	(258)	(10)	(96.1)	(107.5)
Core net profit	1,619	344	819	1,418	1,028	1,045	1.7	203.3

Sources: GPSC, FSSIA estimates

Exhibit 2: Earnings revision

		Current			Previous			Change			
	2024E	2025E	2026E	2024E	2025E	2026E	2024E	2025E	2026E		
	(THB m)	(THB m)	(%)	(%)	(%)						
Revenue	88,432	80,938	79,625	135,977	152,411	165,008	(35.0)	(46.9)	(51.7)		
Net profit	4,097	3,737	3,486	5,776	7,188	7,219	(29.1)	(48.0)	(51.7)		
Key assumptions											
Gas cost (THB/mmbtu)	345	320	320	345	340	345	0.0	(5.9)	(7.2)		
Coal cost (USD/tonne)	140	100	100	140	120	120	0.0	(16.7)	(16.7)		
Tariff (THB/KWh)	4.13	3.76	3.57	4.13	4.15	4.15	0.0	(9.4)	(14.0)		

Source: FSSIA estimate

Tariff reduction impact in 2025-26 from potentially lower Ft by regulator

We believe the Energy Regulatory Committee aims to decrease the electricity price or Ft for the 2025-26 electricity tariff to THB3.76-3.57 per kWh as gas costs decline. They might exempt EGAT from loan repayment, which would help reduce the Ft by THB0.11/kWh and reduce excise and petroleum taxes. However, the cut in the FT would still hit GPSC's 2025 earnings as tariff declines outpace gas cost reductions.-In particular, its SPP business could suffer from lower tariffs in 2025-26.

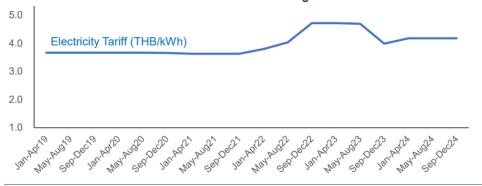
We believe this issue has negatively affected both the short and long-term sentiment of the stock.

The Ft is influenced by government policies and does not accurately reflect actual fuel costs as the government has continually subsidized energy prices to alleviate high living costs and to enhance Thailand's competitive advantage in the region to attract investment. However, we believe the government is moving toward a gradual reduction in energy subsidies, allowing prices to reflect actual costs accurately.

Since 4Q21, GPSC has suffered from the sharp rise in the prices of gas and coal. The rising global supply risks from Russia's invasion of Ukraine since Feb-22 have exacerbated Thailand's energy dilemma as the country needs to import more spot LNG to compensate for the gas supply shortfall from G1 of up to 600mmscfd (12% of Thailand's gas supply).

The gas cost for GPSC's SPPs declined substantially to THB345/mmbtu in 2024, and we expect it to decrease again to THB315/mmbtu in 1Q25. Hence, we believe that energy costs for power generation should stay low due to rising supply from PTTEP and stable demand.

Exhibit 3: Ft and tariff movements in Thailand during 2019-2024



Sources: ERC, EPPO

Exhibit 4: Valuation: WACC calculations

Cost of equity assumptions	(%)	Cost of debt assumptions	(%)
Risk-free rate	3.0	Pretax cost of debt	4.0
Market risk premium	11.0	Marginal tax rate	20.0
Stock beta	1.20		
Cost of equity, Ke	16.2	Net cost of debt, Kd	3.6
Weight applied	37.2	Weight applied	62.8
WACC (%)	8.3		

Source: FSSIA estimate

Exhibit 5: Target price calculations

SoTP valuation estimate	(THB m)	(THB/share)	Comments
Core operating assets	173,422	61.5	Include all SPPs and two hydropower plants
Investments	7,322	2.6	Estimated value for affiliates post 2015, assume EIRR of 12%
Cash	36,853	13.1	At end-2024E
Debt	(143,196)	(50.8)	At end-2024E
Minorities	(11,984)	(4.2)	At end-2024E
Residual ordinary equity	62,418	23.8	
GLOW	53,456	19.0	Excluding SPP replacement projects
XPCL	786	0.3	Assume EIRR 12%, COD Oct 2019
ERU – TOP's CFP project	(4,697)	(1.7)	Assume EIRR 9.4%, COD 2026E
GLOW SPP replacement	(35,624)	(12.6)	Including GEN phase 2, GSPP2&3, and GSPP11#1
AEPL - solar farms (India)	2,701	1.0	Assume EIRR 15%
CFXD - wind farms (Taiwan)	991	0.4	Assume EIRR 8%
Target price	80,032	30.0	

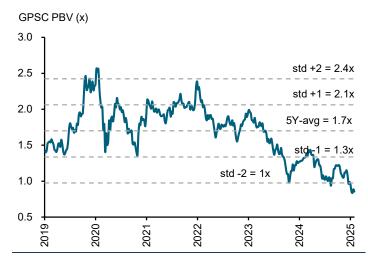
Sources: GPSC, FSSIA estimate

Exhibit 6: Key valuations as of 6 Feb 2025

Company	BBG	Rec	Share	Target	Up	Market	P	'E	RC	E	PB	V	EV/ EB	ITDA
			Price	price	side	Сар	24E	25E	24E	25E	24E	25E	24E	25E
			(LCY)	(LCY)	(%)	(USD m)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
Thailand														
Global Power Synergy*	GPSC TB	HOLD	26.75	30	12	2,233	18.4	20.3	3.8	3.4	0.7	0.7	8.2	9.3
Ratch Group*	RATCH TB	BUY	26.75	36	35	1,722	8.3	7.3	7.0	7.6	0.6	0.6	17.1	19.1
CK Power*	CKP TB	BUY	2.66	3.50	32	640	17.8	12.6	4.4	6.1	8.0	0.8	12.2	13.6
WHA Utilities and Power*	WHAUP TB	HOLD	3.28	5.30	62	371	9.4	7.2	9.6	12.0	0.9	0.8	17.5	15.4
Gulf Energy Development	GULF TB	n/a	56.50	n/a	n/a	19,868	35.3	30.3	14.9	15.4	4.9	4.3	29.3	25.5
B Grimm Power	BGRIM TB	n/a	12.70	n/a	n/a	968	17.8	15.2	4.1	4.9	8.0	0.8	11.0	10.9
BCPG	BCPG TB	n/a	6.65	n/a	n/a	583	8.7	14.4	5.2	4.5	0.6	0.6	10.9	11.6
Energy Absolute	EA TB	n/a	2.64	n/a	n/a	565	3.8	8.5	8.6	4.4	0.2	0.4	8.9	10.3
Electricity Generating	EGCO TB	n/a	98.75	n/a	n/a	1,533	6.3	5.9	7.5	7.8	0.5	0.4	9.0	10.3
Banpu Power	BPP TB	n/a	8.40	n/a	n/a	756	7.4	6.7	6.8	7.3	0.5	0.5	14.2	12.3
Gunkul Engineering	GUNKUL TB	n/a	1.81	n/a	n/a	452	9.5	9.2	10.8	11.2	1.1	1.0	7.5	7.2
Absolute Clean Energy	ACE TB	n/a	1.24	n/a	n/a	371	13.8	9.5	6.0	7.7	8.0	0.7	9.3	7.1
Thailand avg						30,062	13.0	12.3	7.4	7.7	1.0	1.0	12.9	12.7

Sources: Bloomberg; *FSSIA estimates

Exhibit 7: One-year forward P/BV band



Sources: Bloomberg, FSSIA estimates

Exhibit 8: One-year forward EV/EBITDA band



Sources: Bloomberg, FSSIA estimates

Financial Statements

Global Power Synergy

Profit and Loss (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026E
Revenue	123,685	90,303	88,432	79,219	77,611
Cost of goods sold	(120,324)	(80,258)	(76,944)	(69,452)	(67,714)
Gross profit	3,361	10,045	11,488	9,767	9,896
Other operating income	2,731	1,994	2,631	1,579	1,594
Operating costs	(422)	(2,709)	(2,166)	(2,409)	(2,100)
Operating EBITDA	14,783	18,639	21,391	18,023	18,846
Depreciation	(9,113)	(9,309)	(9,438)	(9,086)	(9,455)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	5,670	9,331	11,953	8,937	9,391
Net financing costs	(4,240)	(5,023)	(7,220)	(5,778)	(5,752)
Associates	1,539	1,008	79	1,535	1,019
Recurring non-operating income	1,539	1,008	79	1,535	1,019
Non-recurring items	(1,888)	0	0	0	0
Profit before tax	1,081	5,316	4,812	4,694	4,658
Tax	376	(507)	(61)	(388)	(490)
Profit after tax	1,457	4,809	4,751	4,306	4,167
Minority interests	(566)	(1,115)	(654)	(593)	(574)
Preferred dividends	(300)	(1,113)	(054)	(593)	(374)
Other items	U	U	U	U	U
	- 891	3,694	4,097	3,714	3,594
Reported net profit		•	•	•	•
Non-recurring items & goodwill (net)	1,888	0	0	0	0
Recurring net profit	2,779	3,694	4,097	3,714	3,594
Per share (THB) Recurring EPS *	0.99	1.31	1.45	1.32	1.27
Reported EPS	0.32	1.31	1.45	1.32	1.27
DPS					
	0.50	0.74	0.75	0.80	0.90
Diluted shares (used to calculate per share data) Growth	2,820	2,820	2,820	2,820	2,820
Revenue (%)	65.2	(27.0)	(2.1)	(10.4)	(2.0)
Operating EBITDA (%)	(33.5)	26.1	14.8	(15.7)	4.6
Operating EBIT (%)	(56.4)	64.6	28.1	(25.2)	5.1
Recurring EPS (%)	(68.8)	32.9	10.9	(9.4)	(3.2)
Reported EPS (%)	(87.8)	314.4	10.9	(9.4)	(3.2)
Operating performance	0.7		10.0	40.0	10.0
Gross margin inc. depreciation (%)	2.7	11.1	13.0	12.3	12.8
Gross margin exc. depreciation (%)	10.1	21.4	23.7	23.8	24.9
Operating EBITDA margin (%)	12.0	20.6	24.2	22.8	24.3
Operating EBIT margin (%)	4.6	10.3	13.5	11.3	12.1
Net margin (%)	2.2	4.1	4.6	4.7	4.6
Effective tax rate (%)	82.2	11.8	13.4	12.3	13.5
Dividend payout on recurring profit (%)	50.7	56.5	51.6	60.7	70.6
Interest cover (X)	1.7	2.1	1.7	1.8	1.8
Inventory days	30.9	60.5	54.6	51.6	50.4
Debtor days	49.6	66.6	44.0	30.7	13.7
Creditor days	28.4	46.2	48.5	65.8	68.2
Operating ROIC (%)	(1.0)	(10.2)	(14.4)	(23.2)	(35.0)
ROIC (%)	(0.6)	(4.9)	(5.9)	(9.9)	(14.3)
ROE (%)	2.6	3.5	3.8	3.4	3.3
ROA (%)	0.9	(0.4)	(1.4)	(2.9)	(4.8)
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)	2022	2023	2024E	2025E	2026E
		12,412	16,463	16,378	12,394
Independent power producer	41,724	12,412			12,001
Independent power producer Small power producer	41,724 80,519	76,726	70,836	57,875	58,518

Sources: Global Power Synergy; FSSIA estimates

Financial Statements

Global Power Synergy

Global Power Synergy					
Cash Flow (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026
Recurring net profit	2,779	3,694	4,097	3,714	3,594
Depreciation	9,113	9,309	9,438	9,086	9,45
ssociates & minorities	1,539	1,008	79	1,535	1,019
Other non-cash items	1,318	1,319	1,319	1,320	1,32
Change in working capital	(68)	931	15,368	4,188	5,170
Cash flow from operations	14,681	16,261	30,302	19,843	20,56
Capex - maintenance	(6,237)	(6,236)	(9,413)	(9,086)	(9,455
Capex - new investment	(12,414)	(15,695)	(13,437)	(14,084)	(34,454
Net acquisitions & disposals	(29,145)	(18,912)	(18,826)	(18,171)	(18,911
Other investments (net)	Ó	Ó	Ó	Ó	` ′
Cash flow from investing	(47,797)	(40,843)	(41,676)	(41,341)	(62,820
Dividends paid	0	0	(2,087)	(2,256)	(2,397
Equity finance	0	0	0	0	(=,==:
Debt finance	7,782	16,281	0	0	
Other financing cash flows	25,777	7,261	37,118	34,578	36,65
Cash flow from financing	33,559	23,542	35,031	32,322	34,25
Non-recurring cash flows	-		-		0.,_0
Other adjustments	0	0	0	0	(
Net other adjustments	0	0	0	Ŏ	
Movement in cash	444	(1,040)	23,657	10,823	(7,999
Free cash flow to firm (FCFF)	(28,816.56)	(19,284.32)	(5,510.64)	(16,220.81)	(37,101.60
Free cash flow to equity (FCFE)	443.57	(1,039.63)	25,743.16	13,079.01	(5,602.23
ree cash now to equity (i Ci L)	440.01	(1,059.05)	25,745.10	15,079.01	(3,002.23
Per share (THB)					
FCFF per share	(10.22)	(6.84)	(1.95)	(5.75)	(13.16
FCFE per share	0.16	(0.37)	9.13	4.64	(1.99
Recurring cash flow per share	5.23	5.44	5.30	5.55	5.4
Balance Sheet (THB m) Year Ending Dec	2022	2023	2024E	2025E	2026
Tangible fixed assets (gross)	168,236	168,387	172,387	177,387	202,38
Less: Accumulated depreciation	(75,589)	(75,588)	(85,001)	(94,087)	(103,542
Tangible fixed assets (net)	92,647	92,799	87,385	83,300	98,84
ntangible fixed assets (net)	3,817	2,140	2,141	2,143	2,14
ong-term financial assets	-	-	-	-	
nvest. in associates & subsidiaries	44,372	50,812	50,812	50,812	50,81
Cash & equivalents	14,236	13,197	36,853	47,676	39,67
VC receivable	20,178	12,765	8,545	4,765	1,06
nventories	11,915	11,605	8,593	8,458	7,63
Other current assets	6,494	4,256	4,168	3,734	3,65
Current assets	52,822	41,823	58,160	64,633	52,02
Other assets	95,152	94,129	94,129	94,129	94,12
Total assets	288,810	281,703	292,628	295,016	297,95
Common equity	104,730	106,195	108,205	109,663	110,86
Minorities etc.	10,370	11,330	12,196	13,289	14,46
Total shareholders' equity	115,100	117,525	120,401	122,952	125,32
ong term debt	97,957	98,736	98,736	98,736	98,73
Other long-term liabilities	43,560	26,775	26,775	26,775	26,77
Long-term liabilities	141,516	125,511	125,511	125,511	125,51
A/C payable	10,887	7,060	10,887	10,887	10,88
Short term debt	11,457	26,960	26,960	26,960	26,96
Other current liabilities	9,849	4,647	8,868	8,706	9,27
Current liabilities	32,193	38,667	46,716	46,553	47,12
Fotal liabilities and shareholders' equity	288,810		292,628		297,95
Net working capital	17,850	281,703		295,016	
.	253,838	16,919 256,799	1,551	(2,637)	(7,813
nvested capital Includes convertibles and preferred stock which is be	*	250,799	236,019	227,747	238,11
moduces conventibles and preferred stock which is be	enig treated as debt				
Per share (THB)					
Book value per share	37.14	37.66	38.37	38.89	39.3
Tangible book value per share	35.79	36.90	37.61	38.13	38.5
Financial strength					
Net debt/equity (%)	82.7	95.7	73.8	63.5	68.
Net debt/total assets (%)	33.0	39.9	30.4	26.4	28.
Current ratio (x)	1.6	1.1	1.2	1.4	1.
CF interest cover (x)	4.0	3.9	6.4	5.7	6.
/aluation	2022	2023	2024E	2025E	2026
Recurring P/E (x) *	27.1	20.4	18.4	20.3	21.
Recurring P/E @ target price (x) *	30.4	22.9	20.6	22.8	23.
Reported P/E (x)	84.6	20.4	18.4	20.3	21.
Dividend yield (%)	1.9	2.8	2.8	3.0	3.
Price/book (x)	0.7	0.7	0.7	0.7	0.
Price/tangible book (x)	0.7	0.7	0.7	0.7	0.
EV/EBITDA (x) **	12.2	10.7	8.2	9.3	9.
				0.0	^
EV/EBITDA @ target price (x) **	12.9	11.2	8.7	9.8	9.
	12.9 0.7	11.2 0.8	8. <i>7</i> 0.7	9.8 0.7	9. 0.

Sources: Global Power Synergy; FSSIA estimates

Global Power Synergy (GPSC TB)



Exhibit 9: FSSIA ESG score implication

71.89 / 100

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	A mixed track record of managing the most significant ESG risks and opportunities relative to industry peers.
***	>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 10: ESG – peer comparison

	FSSIA		Domestic ratings					Global ratings						Bloomberg	
	ESG score	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		Υ	AA	5.00	5.00	Certified	Medium	61.24	Α		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	В		53.88	66.00		62.42
GPSC	71.89	Υ	Y	AA	5.00	5.00	Certified	Medium	64.56	В		54.57	86.00		
GUNKUL	68.07		Y	AA	5.00	5.00	Certified	Medium	63.88	AAA		66.66	38.00		59.97

Sources: <u>SETTRADE.com</u>; FSSIA's compilation

Exhibit 11: ESG score by Bloomberg

FY ending Dec 31	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
ESG financial materiality scores - ESG score	4.44	4.46	4.65	4.86	4.68	4.69	4.64	_
BESG environmental pillar score	3.89	3.73	4.20	4.60	4.09	4.00	3.84	_
BESG social pillar score	5.13	5.13	5.07	4.17	4.66	5.06	5.17	_
BESG governance pillar score	4.71	5.10	5.01	6.07	5.77	5.53	5.52	_
ESG disclosure score	64.13	68.40	71.71	76.11	75.18	74.59	74.51	_
Environmental disclosure score	55.97	59.35	71.85	76.44	81.55	79.76	79.52	_
Social disclosure score	48.97	52.15	49.58	55.68	54.08	54.08	54.08	_
Governance disclosure score	87.36	93.62	93.62	96.12	89.86	89.86	89.86	_
Environmental								
Emissions reduction initiatives	Yes							
Climate change policy	Yes							
Climate change opportunities discussed	No							
Risks of climate change discussed	Yes	Yes	Yes	Yes	Yes	No	No	No
GHG scope 1	2,795	2,524	2,805	2,283	11,178	11,845	12,681	8,544
GHG scope 2 location-based	9	4	2	2	21	23	28	29
GHG Scope 3	385	357	344	184	327	1,394	1,555	1,051
Carbon per unit of production	0.33	0.30	0.33	0.30	0.37	0.44	0.45	0.38
Biodiversity policy	Yes							
Energy efficiency policy	Yes							
Total energy consumption	13,748	10,912	10,582	9,815	36,425	50,019	52,895	8,263
Renewable energy use	_	_	_	0	0	3	4	1
Electricity used	23	11	3	4	39	25	56	17
Fuel used - natural gas	1,315,460	1,043,640	2,928,960	2,804,980	2,867,270	3,298,150	3,184,120	3,140,820

 $Sources: Bloomberg; FSSIA's \ compilation$

Exhibit 12: 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	0	0	0	0	1	1	2	1
Total waste	1	1	1	1	23	214	237	147
Waste recycled	0	0	0	0	0	199	222	144
Waste sent to landfills	0.00	0.00	0.00	0.00	16.78	11.46	_	_
Environmental supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Water policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water consumption	_	_	_	_	47,051.60	34,136.90	35,086.90	30,779.90
Social								
Human rights policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Policy against child labor	No	No	No	No	No	No	No	Yes
Quality assurance and recall policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Consumer data protection policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	No	Yes	Yes	Yes	Yes	Yes
Pct women in workforce	30.23	32.19	32.39	32.75	29.83	29.96	29.43	29.44
Pct disabled in workforce	_	_	_	_	0.09	0.09	0.09	0.09
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total recordable incident rate - employees	0.00	0.00	0.00	0.00	2.00	0.09	0.00	0.00
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	258.00	292.00	318.00	345.00	1,076.00	1,108.00	1,128.00	1,104.00
Employee turnover pct	4.02	2.54	3.61	5.22	2.97	3.16	5.76	5.89
Total hours spent by firm - employee training	9,571.80	8,143.88	11,797.80	13,127.20	27,524.10	30,990.80	31,663.00	41,521.40
Social supply chain management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Governance								
Board size	12	12	13	13	15	15	13	13
No. of independent directors (ID)	5	4	5	5	7	7	6	6
No. of women on board	1	2	3	2	2	2	2	2
No. of non-executive directors on board	11	11	12	12	14	14	12	12
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	14	14	19	16	15	12	16	14
Board meeting attendance pct	95	92	90	94	99	100	96	99
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	54	50	48	49	50	48	54	53
Age of the oldest director	67	68	67	67	68	69	67	67
No. of executives / company managers	15	19	19	20	32	36	34	35
No. of female executives	2	4	5	9	11	11	12	9
Executive share ownership guidelines	No	No	No	No	No	No	No	No
Size of audit committee	4	3	3	3	3	3	3	4
No. of ID on audit committee	4	3	3	3	3	3	3	4
			12	3 7		3 7	6	7
Audit meeting attendance %	18 99	11 100	100	100	6 100	100	94	100
Audit meeting attendance % Size of compensation committee	99 3	3	3	100 3	3	3	94 3	3
•				3	ა 1	ა 1	ა 1	
No. of ID on compensation committee	2	2	2		•		-	1
No. of compensation committee meetings	5	7	5	10	5	5	3	100
Compensation meeting attendance %	87	100	100	97	100	100	100	100
Size of nomination committee	3	3	3	3	3	3	3	3
No. of nomination committee meetings	5	7	5	10	5	5	3	3
Nomination meeting attendance %	87	100	100	97	100	100	100	100
Sustainability governance								
Verification type	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Sources: Bloomberg; FSSIA's compilation

Disclaimer for ESG scoring

	Mothodolog				Dating						
ESG score	Methodolog		onenevent	accompand!!	Rating	al invite de d	00 D C	lahal C	***		
The Dow Jones			ransparent, rules-based panies' Total Sustainabil				ne annual S&P G SA) for DJSI. Co				
Sustainability			l Corporate Sustainabili				of the S&P Globa				
Indices (DJSI)		ranked compar	nies within each industr	y are selected for			fied. The constitu	ents of the D	JSI indices are		
By S&P Global	inclusion.				selected from the Eligible Universe.						
SET ESG			sibility in Environmental	•			clusion, verified				
Ratings List			nsparency in Governan		minimum of 50% for each indicator, unless the company is a part of DJSI						
(SETESG) by The Stock			oreemptive criteria, with board members and ex		during the assessment year. The scoring will be fairly weighted against th nature of the relevant industry and materiality.						
Exchange of			and combined holding r				om the SET ES		npanies whose		
Thailand			alifying criteria include:		1) market capitalization > THB5b (~USD150b); 2) free float >20%; and 3)						
(<u>SET</u>)			ors and free float violations social & environmental i				ital for at least 9				
			rnings in red for > 3 year		SETTHSI Index is a market capitalisation-weighted index, cap 5% quarterly weight at maximum, and no cap for number of stocks.						
CG Score	An indicator of	of CG strenath	in sustainable developr	ment. measured	Scores are rate	d in six catego	ries: 5 for Excell	ent (90-100).	4 for Verv		
by Thai			ith support from the Sto		Good (80-89), 3	for Good (70-	-79), 2 for Fair (6	0-69), 1 for P	ass (60-69),		
Institute of Directors		 The results of operations. 	are from the perspective	ve of a third party, not			v 50. Weightings olders (weight 2ร์	,	• ,		
Association	an evaluation	i oi operations.	•				sure & transpare				
(Thai IOD)					responsibilities) (· //	- /		
AGM level	It quantifies t	he extent to wh	nich shareholders' rights	s and equitable	The scores are	classified into	four categories:	5 for Exceller	it (100), 4 for		
By Thai			into business operations		Very Good (90-	99), 3 for Fair	(80-89), and not	rated for scor	es below 79.		
Investors Association		,	disclosed. All form impo								
(TIA) with			ents to be evaluated ann ares before the meeting								
support from		•	eeting (10%). (The first a	· //							
the SEC			on for voting; and 2) facilitat s 1) the ease of attending m	ting how voting rights can be	•						
	and verifiability,	and 3) opennes:	s for Q&A. The third involve	es the meeting minutes that							
			s, resolutions and voting res								
Thai CAC By Thai			hecklist include corruptions, and the monitoring a				d by a committe r granting certific				
Private Sector		•	good for three years.	ind developing of			e twelve highly r				
Collective	(Companies de	ciding to become	e a CAC certified member st		professionalism and ethical achievements.						
Action Against			an 18-month deadline to sub ssment, in place of policy ar								
Corruption (CAC)	managers and	employees, estab	blishment of whistleblowing								
		of policies to all	*								
Morningstar Sustainalytics			k rating provides an ove f how much of a compar				score is the sum nigher ESG risk i		d risk. The		
Oustainarytics	based on an	assessificiti oi	i now much of a compar	ily a exposure to Loo		ianayeu, ine i	lighter Loo hak i	3 30016u.			
	risk is unman	aged. Sources t	to be reviewed include corp	orate publications and		•					
	regulatory filing	s, news and othe	er media, NGO reports/webs	sites, multi-sector	NEGL	Low	Medium	High	Severe		
	regulatory filing information, co	s, news and othe	er media, NGO reports/webs ESG controversies, issuer	sites, multi-sector		-	Medium 20-30	High 30-40	Severe 40+		
ESG Book	regulatory filing information, coi reports, and qu	s, news and othe mpany feedback, ality & peer revie	er media, NGO reports/webs . ESG controversies, issuer .ws.	sites, multi-sector feedback on draft ESG	NEGL 0-10	Low 10-20	20-30	30-40	40+		
ESG Book	regulatory filing information, col reports, and qu	s, news and othe mpany feedback, ality & peer revie ore identifies su	er media, NGO reports/webs ESG controversies, issuer	sites, multi-sector feedback on draft ESG nat are better	NEGL 0-10 The total ESG s	Low 10-20 core is calcula		30-40 ed sum of the	40+ features		
ESG Book	regulatory filing information, correports, and queen The ESG scorpositioned to the principle of the principl	s, news and other mpany feedback, ality & peer reviewed by the identifies sure outperform over financial materials.	er media, NGO reports/webs ESG controversies, issuer ws. ustainable companies the er the long term. The m teriality including inform	nat are better ethodology considers action that significantly	NEGL 0-10 The total ESG s scores using ma	Low 10-20 core is calcula teriality-base	20-30 ated as a weighte	30-40 ed sum of the	40+ features		
ESG Book	regulatory filing information, correports, and queen The ESG scorpositioned to the principle of helps explain	s, news and other mpany feedback, ality & peer reviewore identifies sure outperform over financial materials.	er media, NGO reports/webst ESG controversies, issuer ws. ustainable companies the ter the long term. The m teriality including inform justed performance. Ma	nat are better ethodology considers action that significantly teriality is applied by	NEGL 0-10 The total ESG s scores using ma	Low 10-20 core is calcula teriality-base	20-30 ated as a weighted d weights. The se	30-40 ed sum of the	40+ features		
ESG Book	regulatory filing information, correports, and queen The ESG scc positioned to the principle helps explain over-weighting.	s, news and other mpany feedback, ality & peer reviewore identifies sure outperform over financial materials.	er media, NGO reports/webs ESG controversies, issuer ivs. Justainable companies the er the long term. The metriality including inform justed performance. Man in higher materiality and	nat are better ethodology considers action that significantly teriality is applied by	NEGL 0-10 The total ESG s scores using ma	Low 10-20 core is calcula teriality-base	20-30 ated as a weighted d weights. The se	30-40 ed sum of the	40+ features		
	regulatory filing information, coureports, and queen The ESG scc positioned to the principle of helps explain over-weighting weights on a	s, news and othe mpany feedback, ality & peer revieure identifies sure outperform over of financial materials. The future risk-adjug features with rolling quarterles.	er media, NGO reports/webst ESG controversies, issuer ws. Isstainable companies the ter the long term. The meteriality including informities justed performance. Man in higher materiality and by basis.	nat are better ethodology considers action that significantly teriality is applied by	NEGL 0-10 The total ESG s scores using ma and 100 with hig	Low 10-20 core is calcula iteriality-based ther scores in	20-30 ated as a weighted d weights. The se dicating better pe	30-40 ed sum of the core is scaled erformance.	40+ features between 0		
ESG Book	regulatory filing information, coin reports, and quericon The ESG scc positioned to the principle whelps explain over-weightin weights on a MSCI ESG ra	s, news and othe mpany feedback, ality & peer revieure identifies su outperform ow of financial mate future risk-adjug features with rolling quarterlatings aim to m	er media, NGO reports/webs ESG controversies, issuer ivs. Istainable companies the er the long term. The m teriality including inform justed performance. Main higher materiality and by basis.	nat are better ethodology considers nation that significantly teriality is applied by rebalancing these	NEGL 0-10 The total ESG s scores using ma and 100 with higher televant ESG risk	Low 10-20 core is calculateriality-basee, wher scores in	20-30 ated as a weighted weights. The sidicating better permitted the second se	30-40 ed sum of the core is scaled erformance.	40+ features between 0		
	regulatory filing information, coin reports, and quericon The ESG scc positioned to the principle whelps explain over-weightin weights on a MSCI ESG ra	s, news and othe mpany feedback, ality & peer revieure identifies su outperform ow of financial mate future risk-adjug features with rolling quarterlatings aim to m	er media, NGO reports/webs ESG controversies, issuer iws. ustainable companies the er the long term. The m teriality including inform justed performance. Mai in higher materiality and by basis. leasure a company's mad d laggards according to	nat are better ethodology considers hation that significantly teriality is applied by rebalancing these anagement of financially is their exposure to ESG ris	NEGL 0-10 The total ESG s scores using mand 100 with higher televant ESG risks and how well	Low 10-20 core is calcula tteriality-base- yher scores in s and opportu-	20-30 ated as a weighted weights. The sidicating better permitted the state of the	30-40 ed sum of the core is scaled erformance. rules-based move to peers.	40+ features between 0		
	regulatory filing information, con reports, and quere The ESG scc positioned to the principle helps explain over-weightin weights on a MSCI ESG raidentify indus	s, news and othe mpany feedback, ality & peer revieure identifies su outperform out fiture risk-adjug features with rolling quarterlatings aim to metry leaders and	er media, NGO reports/webst ESG controversies, issuer ivs. Istainable companies the er the long term. The metrality including inform justed performance. Main higher materiality and by basis. Interest the second of the second of the second interest the second of the second of the second of the second interest the second of the second o	nat are better ethodology considers ration that significantly teriality is applied by rebalancing these anagement of financially i	NEGL 0-10 The total ESG s scores using mand 100 with higher televant ESG risks and how well	Low 10-20 core is calcula tteriality-base- yher scores in s and opportu-	20-30 ated as a weighted weights. The sidicating better permitted the state of the	30-40 ed sum of the core is scaled erformance. rules-based move to peers.	40+ features between 0		
	regulatory filing information, con reports, and qui The ESG scc positioned to the principle chelps explain over-weightin weights on a MSCI ESG raidentify indus	s, news and othe mpany feedback, ality & peer revieure identifies su outperform outperform outperform of financial materials and future risk-adjug features with rolling quarterlatings aim to materials and try leaders and 8.571-10.000	er media, NGO reports/webs ESG controversies, issuer iws. ustainable companies the er the long term. The m teriality including inform justed performance. Mai in higher materiality and by basis. leasure a company's mad d laggards according to	nat are better ethodology considers action that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris	NEGL 0-10 The total ESG s scores using ma and 100 with high relevant ESG risk sks and how well anaging the most significant in the state of the sta	Low 10-20 core is calculateriality-baseigher scores in s and opportutely manage	20-30 ated as a weights the sidicating better policities. It uses a inthose risks relations and opportunities.	30-40 ad sum of the core is scaled erformance. rules-based move to peers.	features between 0		
	regulatory filing information, con reports, and quero reports, and quero reports, and to positioned to the principle chelps explain over-weightin weights on a MSCI ESG reidentify indus AAA AA	s, news and othe mpany feedback, adity & peer revieure identifies su outperform and future risk-adjug features with rolling quarterlatings aim to mutry leaders and 8.571-10.000 7.143-8.570	er media, NGO reports/webs ESG controversies, issuer iws. ustainable companies the er the long term. The m teriality including inform justed performance. Mai in higher materiality and by basis. leasure a company's mad d laggards according to	nat are better rethodology considers ration that significantly rebalancing these rebalancing these reduction to the significantly rebalancing these reduction to the significant significa	NEGL 0-10 The total ESG s scores using ma and 100 with high relevant ESG risk sks and how well anaging the most significant in the state of the sta	Low 10-20 core is calculateriality-bases in the scores in scores in sand opportunity manage unificant ESG risk	20-30 ated as a weights the sidicating better policities. It uses a inthose risks relations and opportunities.	30-40 ad sum of the core is scaled erformance. rules-based move to peers.	features between 0		
	regulatory filing information, con reports, and quere positioned to the principle chelps explain over-weightin weights on a MSCI ESG reidentify indus AAA AA A	s, news and other many feedback, ality & peer revier or eidentifies sure outperform own of financial material future risk-adjug features with rolling quarter latings aim to material to material feedback and see the seed of	er media, NGO reports/webs ESG controversies, issuer iws. ustainable companies the er the long term. The meteriality including informaliusted performance. Man in higher materiality and by basis. useasure a company's mandal aggards according to Leader:	nat are better ethodology considers action that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris	NEGL 0-10 The total ESG s scores using ma and 100 with high relevant ESG risk sks and how well anaging the most significant in the state of the sta	Low 10-20 core is calculateriality-bases in the scores in scores in sand opportunity manage unificant ESG risk	20-30 ated as a weights the sidicating better policities. It uses a inthose risks relations and opportunities.	30-40 ad sum of the core is scaled erformance. rules-based move to peers.	features between 0		
	regulatory filing information, correports, and quericontended to the principle in over-weightin weights on a MSCI ESG raidentify industrial AAA AA AA BBBB	s, news and other many feedback, ality & peer revier or identifies sure outperform own of financial market future risk-adjug features with rolling quarter latings aim to matry leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713	er media, NGO reports/webs ESG controversies, issuer ivs. Istainable companies the er the long term. The metriality including inform justed performance. Man in higher materiality and by basis. Indeasure a company's mand diaggards according to Leader: Average:	nat are better rethodology considers ration that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers	NEGL 0-10 The total ESG s scores using ma and 100 with high relevant ESG risk sks and how well anaging the most signal track record of ma	Low 10-20 core is calculateriality-basee, ther scores in s and opportutely manage unificant ESG ris	20-30 ated as a weighted weights. The sidicating better policiating better policiating better policiations. It uses a new those risks relations with the significant ESG risks and opportunities.	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s	features between 0		
	regulatory filing information, correports, and quericontended to the principle in over-weightin weights on a MSCI ESG raidentify industrial AAA AA BBB BB	s, news and other many feedback, ality & peer revieure identifies su outperform ow outperform ow financial mal future risk-adj g features with rolling quarter latings aim to m try leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285	er media, NGO reports/webs ESG controversies, issuer iws. ustainable companies the er the long term. The meteriality including informaliusted performance. Man in higher materiality and by basis. useasure a company's mandal aggards according to Leader:	nat are better rethodology considers ration that significantly rebalancing these rebalancing these reduction to the significantly rebalancing these reduction to the significant significa	NEGL 0-10 The total ESG s scores using ma and 100 with high relevant ESG risk sks and how well anaging the most signal track record of ma	Low 10-20 core is calculateriality-basee, ther scores in s and opportutely manage unificant ESG ris	20-30 ated as a weighted weights. The sidicating better policiating better policiating better policiations. It uses a new those risks relations with the significant ESG risks and opportunities.	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s	features between 0		
	regulatory filing information, con reports, and quere The ESG scopositioned to the principle with the principle of the princi	s, news and othe many feedback, ality & peer revieure identifies su outperform ow of financial mat future risk-adjug features with rolling quarter atings aim to matry leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428	er media, NGO reports/webs ESG controversies, issuer ivs. ustainable companies the er the long term. The m teriality including inform iusted performance. Main higher materiality and by basis. leasure a company's mad d laggards according to Leader: Average: Laggard:	nat are better rethodology considers ration that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers	NEGL 0-10 The total ESG s scores using mand 100 with high and 100 with high and 100 with high analysis and how well analysing the most signal track record of mand d on its high exposure.	Low 10-20 core is calcula teriality-base pher scores in s and opportu they manage unificant ESG ris maging the most	20-30 ated as a weighted weights. The sidicating better partitions. It uses a network risks relation with the significant ESG risks manage significant	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunt tests and opportunt tests and opportunt tests.	features between 0 methodology to		
MSCI	regulatory filing information, con reports, and questioned to the principle of helps explain over-weightin weights on a MSCI ESG raidentify industrial AAA AA BBB BB BCCCC	s, news and othe many feedback, ality & peer revieure identifies su outperform outperfor	er media, NGO reports/webs: ESG controversies, issuer ivs. Istainable companies the er the long term. The meteriality including inform justed performance. Man higher materiality and hy basis. Ideasure a company's man di laggards according to Leader: Average: Laggard: Lee to which companies eregrating ESG factors in	nat are better ethodology considers nation that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and	NEGL 0-10 The total ESG s scores using mand 100 with high and 100 with high analysis and how well analysing the most signal track record of mand d on its high exposurations.	Low 10-20 core is calcula teriality-base ther scores in s and opportute they manage inificant ESG ris maging the most	20-30 ated as a weighted weights. The sedicating better permitties. It uses a rethose risks relations and opportunities significant ESG risks manage significant and plementation of	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunt tests of the core is scaled to the	features between 0 nethodology to nities relative to		
MSCI Moody's ESG solutions	regulatory filing information, con reports, and questioned to the principle chelps explain over-weightin weights on a MSCI ESG raidentify indus AAA AA BBB BB BCCC Moody's asset believes that create sustain	s, news and othe mpany feedback, adity & peer revieure identifies su outperform outperfo	er media, NGO reports/webst ESG controversies, issuer ivs. Instainable companies the ter the long term. The teriality including inform tusted performance. Man in higher materiality and ly basis.	nat are better nethodology considers nation that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term.	NEGL 0-10 The total ESG s scores using ma and 100 with high and 100 with high anaging the most signal track record of mand d on its high exposure piectives in the delirelatively outper	Low 10-20 core is calcula teriality-base ther scores in s and opportute they manage inificant ESG ris maging the most are and failure to finition and in forming its pe	20-30 ated as a weighted weights. The sedicating better permitties. It uses a rethose risks relatives and opportunities significant ESG rismanage significant establishment of the resist better position.	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunt t ESG risks their strategy tioned to mitig	features between 0 nethodology to nities relative to policies. It gate risks and		
MSCI Moody's ESG solutions Refinitiv ESG	regulatory filing information, con reports, and quere The ESG scc positioned to the principle of helps explain over-weightin weights on a MSCI ESG raidentify industrial AAA AA BBB BB BCCC Moody's asset believes that create sustain Designed to the report of the product of the total content of the total	s, news and othe many feedback, ality & peer revieure identifies su outperform out future risk-adjug features with rolling quarter latings aim to many feedback, and future risk-adjug features with rolling quarter latings aim to many leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428 resses the degrate a company intenable value for transparently a	er media, NGO reports/webst ESG controversies, issuer ivis. Istainable companies the er the long term. The meteriality including inform justed performance. Man higher materiality and hy basis. Ideasure a company's man diaggards according to Leader: Average: Laggard: Lee to which companies legrating ESG factors in rishareholders over the land objectively measure	nat are better ethodology considers nation that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term.	NEGL 0-10 The total ESG s scores using ma and 100 with high relevant ESG risks sks and how well anaging the most signal track record of mand on its high exposure opectives in the deli relatively outper G performance, c	Low 10-20 core is calculateriality-based the scores in sand opportute they manage unificant ESG rise and failure to efficition and informing its performing its performing its performing the most of the score and failure to efficit on and informing its performing its performing its performing its performing its performing its performing its performance in the score in	20-30 ated as a weighted weights. The sedicating better permitties. It uses a lithose risks relative as and opportunities as significant ESG risks manage significant and plementation of the significant estimates and effectiveness.	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunit t ESG risks their strategy tioned to mitigatoric across 10 mains.	features between 0 nethodology to nities relative to policies. It just a risks and in themes,		
MSCI Moody's ESG solutions	regulatory filing information, con reports, and question reports repor	s, news and othe many feedback, ality & peer revieure identifies su outperform ow financial mat future risk-adjug features with rolling quarter latings aim to matry leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428 esses the degree a company intenable value for transparently a policly available	er media, NGO reports/webst ESG controversies, issuer ives. Istainable companies the er the long term. The metriality including inform justed performance. Main higher materiality and ly basis. Ideasure a company's main diaggards according to Leader: Average: Laggard: Leagard: Lea	nat are better ethodology considers iation that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term. a company's relative ESG escore ranges from 0 to 2	NEGL 0-10 The total ESG is scores using mand 100 with high relevant ESG risk sks and how well anaging the most signal track record of mand on its high exposure opectives in the deal relatively outper G performance, color on relative ES	Low 10-20 core is calculateriality-basee, where scores in sand opportunithely manage initiates and failure to efficiation and informing its performant and opportunities.	20-30 ated as a weighted weights. The sedicating better permitties. It uses a lithose risks relation where the significant ESG risks and opportunities are significant estimated by the significant estimates are significant estimates.	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunities their strategy tioned to mittige across 10 mant degree of the core is solved.	features between 0 nethodology to nities relative to policies. It just a risks and in themes,		
Moody's ESG solutions Refinitiv ESG rating	regulatory filing information, con reports, and question and the the principle of the princ	s, news and othe many feedback, ality & peer revieure identifies su outperform out future risk-adjug features with rolling quarter latings aim to many feedback, and future risk-adjug features with rolling quarter latings aim to many feedback, and feedbac	er media, NGO reports/webst ESG controversies, issuer ives. Istainable companies the ret he long term. The meteriality including inform usted performance. Main higher materiality and by basis. Interest a company's main diagrands according to Leader: Average: Laggard: Laggard: Lee to which companies egrating ESG factors in the shareholders over the land objectively measure and auditable data. The apublicly. (Score ratings a	nat are better ethodology considers nation that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term. a company's relative ESG escore ranges from 0 to 2 are 0 to 25 = poor; >25 to 50 =	NEGL 0-10 The total ESG s scores using ma and 100 with high selective selection and the selection of the se	Low 10-20 core is calculateriality-based the scores in search opportute they manage inificant ESG rise and failure to efficition and informing its performant as GG performan 75 = good; and	20-30 ated as a weighted weights. The sedicating better permitties. It uses a rethose risks relatives and opportunities significant ESG risks and opportunities significant establishment of the significant establishment of the significant establishment of the significant establishment of the significant establishment establ	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunt t ESG risks their strategy tioned to mitig across 10 mant degree of to lent.)	features between 0 methodology to methodology to policies. It pate risks and in themes, ransparency in		
MSCI Moody's ESG solutions Refinitiv ESG	regulatory filing information, con reports, and question reports a	s, news and othe many feedback, ality & peer revieure identifies su outperform ow financial materials future risk-adjug features with rolling quarter latings aim to materials at the manual strategy of the m	er media, NGO reports/webst ESG controversies, issuer ives. Istainable companies the er the long term. The meteriality including inform justed performance. Man higher materiality and ly basis. Ideasure a company's mad laggards according to Leader: Average: Laggard: Leader: Laggard: Leader: Laggard: Leader: Laggard:	nat are better ethodology considers iation that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term. a company's relative ESG escore ranges from 0 to 2	NEGL 0-10 The total ESG s scores using ma and 100 with high and 100 with high analysis and how well analysis	Low 10-20 core is calculateriality-basee, where scores in sand opportunithely manage initiates and failure to efficiation and informing its performant and the commitment at the commitment at the commitment and the commitment and the commitment and the commitment are commitment and the commitment	20-30 ated as a weighted weights. The sedicating better permitties. It uses a rethose risks relatives and opportunities significant ESG risks and opportunities significant establishment of the significant establishment of the significant establishment of the significant establishment of the significant establishment establ	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunt t ESG risks their strategy tioned to mitig across 10 mant degree of to lent.)	features between 0 methodology to hities relative to policies. It just a risks and in themes, ansparency in		
Moody's ESG solutions Refinitiv ESG rating	regulatory filing information, con reports, and question reports a	s, news and othe many feedback, ality & peer revieure identifies su outperform out of financial material future risk-adjug features with rolling quarter latings aim to material future risk-adjug features with rolling quarter latings aim to material future risk-adjug features with rolling aim to material features and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428 peesses the degral a company internable value for transparently a olicity available terial ESG data bal ESG Score its peers within	er media, NGO reports/webs: ESG controversies, issuer ivis. Istainable companies the er the long term. The meteriality including inform justed performance. Main higher materiality and hy basis. Ideasure a company's main diaggards according to Leader: Average: Laggard: Laggard: Lee to which companies legrating ESG factors in in shareholders over the land objectively measure and auditable data. The lag publicly. (Score ratings a legis a relative score mean the same industry class)	nat are better ethodology considers action that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term. a company's relative ESG are 0 to 25 = poor; >25 to 50 = assuring a company's performance in the service of the service	NEGL 0-10 The total ESG s scores using ma and 100 with high series and 100 with high relevant ESG risk sks and how well anaging the most signal track record of mand on its high exposure of the state	Low 10-20 core is calculateriality-based the scores in second in the scores in second in the scores in second in the score in the second in the score in the second in the score in the s	20-30 ated as a weighted weights. The sedicating better permitties. It uses a representation of the sedicating better permitties are significant and effectiveness of the sedication of the sed	30-40 ed sum of the core is scaled erformance. rules-based move to peers. s ks and opportunit t ESG risks their strategy tioned to mitig across 10 mant degree of to portunities, and portunities, and portunities, and	features between 0 methodology to hities relative to policies. It just a risks and in themes, ansparency in d impacts		
Moody's ESG solutions Refinitiv ESG rating S&P Global	regulatory filing information, con reports, and quere The ESG score positioned to the principle of the princ	s, news and othe many feedback, ality & peer revieure identifies su outperform ow of financial mat future risk-adjug features with rolling quarter latings aim to matry leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428 sesses the degree a company intenable value for arransparently a blicly available terial ESG data bal ESG Score its peers within	er media, NGO reports/webs: ESG controversies, issuer ivis. Justainable companies the er the long term. The m teriality including inform justed performance. Main higher materiality and ly basis. Justainable companies the higher materiality and higher	sites, multi-sector feedback on draft ESG nat are better ethodology considers ration that significantly teriality is applied by rebalancing these anagement of financially is their exposure to ESG rise leading its industry in material exposure to ESG rise leading its industry in material exposure to ESG rise leading its industry peers lagging its industry base take into account ESG of the its business model and medium to long term. In a company's relative ESG of the export of the exposure from 0 to 25 according a company's performing a company's performing a company's aggregating the company's aggregating the company's aggregating the company's aggregation.	NEGL 0-10 The total ESG s scores using ma and 100 with high and 100 with high analysis and how well analysis and how well analysis and track record of mand on its high exposure of the state of the st	Low 10-20 core is calcula teriality-base ther scores in s and opportu- they manage unificant ESG ris aging the most re and failure to forming its pe commitment an GG performan 75 = good; and management of ental, Social a The score is a	20-30 ated as a weighte diveleghts. The second category in the seco	30-40 ad sum of the core is scaled enformance. Trules-based move to peers. s ks and opportunities across 10 maint degree of the lent.) portunities, and (ESG) perforalized mean (features between 0 nethodology to nethodology to policies. It pate risks and in themes, ransparency in d impacts		
Moody's ESG solutions Refinitiv ESG rating S&P Global	regulatory filing information, con reports, and quere The ESG score positioned to the principle of the princ	s, news and othe many feedback, ality & peer revieure identifies su outperform ow of financial mat future risk-adjug features with rolling quarter latings aim to matry leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428 sesses the degree a company intenable value for arransparently a blicly available terial ESG data bal ESG Score its peers within	er media, NGO reports/webs: ESG controversies, issuer ivis. Justainable companies the er the long term. The m teriality including inform justed performance. Main higher materiality and ly basis. Justainable companies the higher materiality and higher	nat are better ethodology considers action that significantly teriality is applied by rebalancing these anagement of financially i their exposure to ESG ris leading its industry in ma a mixed or unexceptiona industry peers lagging its industry base take into account ESG of to its business model and medium to long term. a company's relative ESG are 0 to 25 = poor; >25 to 50 = assuring a company's perfo sification. The score rang ating the company's aggr	NEGL 0-10 The total ESG s scores using ma and 100 with high and 100 with high analysis and how well analysis and how well analysis and track record of mand on its high exposure of the state of the st	Low 10-20 core is calcula teriality-base ther scores in s and opportu- they manage unificant ESG ris aging the most re and failure to forming its pe commitment as GG performan 75 = good; and management of ental, Social a The score is a	20-30 ated as a weighte diveleghts. The second category in the seco	30-40 ad sum of the core is scaled enformance. Trules-based move to peers. s ks and opportunities across 10 maint degree of the lent.) portunities, and (ESG) perforalized mean (features between 0 nethodology to nethodology to policies. It pate risks and in themes, ransparency in d impacts		
Moody's ESG solutions Refinitiv ESG rating S&P Global	regulatory filing information, con reports, and quere The ESG score positioned to the principle of the princ	s, news and othe many feedback, ality & peer revieure identifies su outperform ow of financial materials ality and future risk-adjug features with rolling quarterlatings aim to matry leaders and 8.571-10.000 7.143-8.570 5.714-7.142 4.286-5.713 2.857-4.285 1.429-2.856 0.000-1.428 casses the degrate a company internable value for a company i	er media, NGO reports/webs: ESG controversies, issuer ivis. Justainable companies the er the long term. The m teriality including inform justed performance. Main higher materiality and ly basis. Justainable companies the higher materiality and ly basis. Justainable company's main definition of the language of the Leader: Average: Laggard:	sites, multi-sector feedback on draft ESG nat are better ethodology considers ration that significantly teriality is applied by rebalancing these anagement of financially is their exposure to ESG rise leading its industry in material exposure to ESG rise leading its industry in material exposure to ESG rise leading its industry peers lagging its industry base take into account ESG of the its business model and medium to long term. In a company's relative ESG of the export of the exposure from 0 to 25 according a company's performing a company's performing a company's aggregating the company's aggregating the company's aggregating the company's aggregation.	NEGL 0-10 The total ESG s scores using ma and 100 with high and 100 with high analysis and how well analysis and track record of ma d on its high exposure of the company	Low 10-20 core is calculateriality-base, ther scores in sand opportute they manage unificant ESG risk anaging the most are and failure to effinition and informing its performan 75 = good; and management of the score is a fority ranking. The score rank.	20-30 ated as a weighte diveleghts. The sedicating better production of the sedicating better production of the sedicating better production of the sedication of the sedicat	30-40 ad sum of the core is scaled arrower to peers. s ks and opportunities arrower to peers. t ESG risks their strategy tioned to mitigate across 10 man to degree of the cortunities, and (ESG) performalized mean (pm 0 to 10; 10 one to 100 for to 100 for the core is a core in the core in th	features between 0 nethodology to ne		

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.

This report has been prepared by FSS International Investment Advisory Securities Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSSIA makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSSIA has no intention to solicit investors to buy or sell any security in this report. In addition, FSSIA does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

This report may not be reproduced, distributed or published by any person in any manner for any purpose without permission of FSSIA. Investment in securities has risks. Investors are advised to consider carefully before making investment decisions.

History of change in investment rating and/or target price



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

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

Price and TP are in local currency

Source: FSSIA estimates

CK Power (CKP TB) Feb-22 Aug-22 Feb-23 Aug-23 Feb-24 Aug-24 Feb-25 7 6 5 4 3 2 CK Power Target Price (THB) Date Rating Target price Date Rating Target price Date Rating Target price 22-Feb-2022 BUY 6.60 07-Jun-2024 BUY 4.40 16-Jan-2025 BUY 3.50 BUY BUY 4.35 11-Nov-2022 6.50 20-Sep-2024

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) Feb-22 Aug-22 Feb-23 Aug-23 Feb-24 Aug-24 Feb-25 6.0 5.5 5.0 4.5 4.0 3.5 3.0 WHA Utilities and Power **Target Price** (THB)

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

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

Price and TP are in local currency

Source: FSSIA estimates



Songklod Wongchai started covering this stock from 20-Dec-2024

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Global Power Synergy	GPSC TB	THB 26.75	HOLD	Upside risks to our SoTP-based TP include 1) higher-than-expected Ft; 2) faster MW expansion; and 3) lower interest rates. Downside risks to our SoTP-based TP 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 2.66	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 3.28	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
Ratch Group	RATCH TB	THB 26.75	BUY	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.

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 06-Feb-2025 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price* - current price) / 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.