

Power Sector

Neutral Downgraded

เราเปลี่ยนมุมมองเกี่ยวกับแนวโน้มของกลุ่มและปรับลดน้ำหนักหุ้นในกลุ่มโรงไฟฟ้าจาก Overweight เป็น Neutral เนื่องจากภูมิทัศน์ของอุตสาหกรรมดูเป็นบวกน้อยลง โดยพบว่ามีสามปัจจัยลบซึ่งมีน้ำหนักมากกว่าสองปัจจัยบวก ซึ่งปัจจัยลบได้แก่ การออกแผน PDPs ฉบับใหม่ของไทยและเวียดนามล่าช้าออกไป, สถานะการแข่งขันที่สูง และ วัฏจักรดอกเบี้ยขาขึ้น, และ คาดเห็นการปรับลดกำไรของตลาด ส่วนสองปัจจัยบวกได้แก่ ผลประกอบการที่คาดว่าจะดีขึ้นอย่างมากในปี 2566 และ ปัจจัยภายนอกที่เอื้ออำนวย เรายังคงเลือก GULF* เป็นหุ้นเด่นในกลุ่ม จากปัจจัยพื้นฐานที่เหนือกว่า ในขณะที่เราชื่นชอบ BGRIM* และ GPSC* ด้วยจากแนวโน้มกำไรที่คาดดีตัวแรง และการเข้าซื้อเชิงกำไรจากปัจจัยภายนอก

ปัจจัยบวกอยู่ไกลออกไป; D/G to Neutral

Event

ปรับลดน้ำหนักหุ้นกลุ่มโรงไฟฟ้า และอัปเดตแนวโน้มของกลุ่ม

Impact

กลยุทธ์ – ผู้เล่นรายใหญ่จะเป็นตัวนำตลาดในปี 2566

เราเปลี่ยนมุมมองเกี่ยวกับแนวโน้มของกลุ่มเนื่องจากพบว่ามีสามปัจจัยลบซึ่งมีน้ำหนักมากกว่าสองปัจจัยบวก โดยในปีที่เรายังคงชอบโรงไฟฟ้าขนาดใหญ่มากกว่าจากแนวโน้มการเติบโตที่เหนือกว่า มีความชำนาญในหลายด้าน เครื่องมือธุรกิจที่กว้างขวาง งบดุลที่แข็งแกร่ง และเครดิตเรตติ้งที่สูงกว่า ทั้งนี้ผู้เล่นที่เข้าเกณฑ์ของเราได้โดย GULF* (หุ้นเด่นของเราในกลุ่มนี้) รองลงมาคือ BGRIM* และ GPSC*

สามปัจจัยลบมีน้ำหนักมากกว่าสองปัจจัยบวก

#1 ความหวังที่ขมขื่น การออกแผน PDPs ฉบับใหม่ของไทยและเวียดนามน่าจะถูกล่ามุดจากปัจจัยความไม่แน่นอนต่าง ๆ โดยในส่วนของไทย PDP น่าจะเป็นฉบับปรับปรุงมากกว่าจะเป็นฉบับใหม่เนื่องจากกำลังจะมีการจัดการเลือกตั้ง ในขณะที่เดียวกัน เวียดนามยังคงเผชิญกับปัญหาเสถียรภาพทางการเมือง โดยในปี 2566 ไทยน่าจะขึ้นค่า Ft จนสุดแล้วและกำลังเป็นขาลง ในขณะที่ราคาพลังงานอยู่ในขาลงเช่นกัน

#2 สถานะการแข่งขันที่สูง & วัฏจักรดอกเบี้ยขาขึ้น ในเป็นยุคแห่งการเปลี่ยนผ่านไปสู่การใช้พลังงานสีเขียวมากขึ้น บริษัทน้ำมันและก๊าซต่างเขามามีบทบาทในการเขามารวมกับกระแสตรึงนี้ด้วยซึ่งทำให้การแข่งขันเข้มข้นมากขึ้น นอกจากนี้ วัฏจักรดอกเบี้ยขาขึ้นที่ดำเนินต่อเนื่องตลอดปี 2566 ซึ่งจะทำให้หาดีลใหม่ ๆ ที่มี IRRs น่าสนใจเหมือนในอดีตหาได้ยาก

#3 คาดเห็นการปรับลดกำไรของตลาด จากความล่าช้าในการปิดดีล, ค่า Ft ที่จะพลิกมาลดลง, การขายการลงทุน, และผลการดำเนินงานของบางโครงการออนไลน์ เรามองว่าโรงไฟฟ้าขนาดเล็ก (SPPs) ยังมี downside อีก และรวมไปถึง RATCH*, EGCO*, BPP*, และ CKP*

ทั้งนี้สองปัจจัยบวกที่ราคาหุ้นน่าจะสะท้อนไประดับหนึ่งแล้ว ได้แก่ i) กำไรของกลุ่มที่คาดว่าจะดีขึ้นในปี 2566 นำโดย GULF, GPSC, RATCH และ BGRIM ซึ่งคาดว่ากำไรจะออกมาประทับใจจากโครงการที่อยู่ใน pipeline และ margin ที่ดีขึ้น โดยเราคาดว่าผลประกอบการของ GPSC และ BGRIM น่าจะคิดตัวขึ้นได้แรงมากจากฐานที่ต่ำ และ ii) ปัจจัยภายนอกส่งผลดีต่อกลุ่มโรงไฟฟ้า ได้แก่ ราคาน้ำมัน อัตราผลตอบแทนพันธบัตร และ อัตราแลกเปลี่ยน USS/THB

Valuation and action

เราปรับลดน้ำหนักหุ้นกลุ่มโรงไฟฟ้าจาก Overweight เป็น Neutral ซึ่งหลังจากที่ราคาหุ้นร่วงลงมายกแพร่ทำให้ risk/reward ของหุ้นกลุ่มนี้ดูน่าสนใจมากขึ้น แม้ว่าภูมิทัศน์ของอุตสาหกรรมดูเป็นบวกน้อยลง โดยเราเลือก GULF เป็นหุ้นเด่นของเราในกลุ่มนี้ เพราะนอกจากจะมีแนวโน้มเติบโตอย่างราบรื่นแล้วกลยุทธ์ของบริษัทที่มุ่งกระจายธุรกิจ โดยมีเครื่องมือที่แข็งแกร่ง และศักยภาพสูงทำให้ GULF ดูน่าสนใจมากกว่า และแตกต่างจากหุ้นอื่นในกลุ่ม

Risks

ปิดซ่อมบำรุงนอกแผน, cost overruns, ความผันผวนของอัตราแลกเปลี่ยน และอัตราดอกเบี้ย

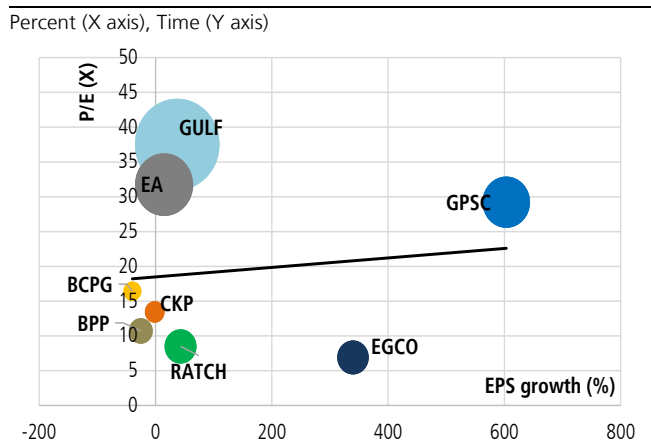
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Peer comparison

Stocks	Rating	TP Bt	Mkt.price Bt	Upside (%)	Mkt.cap (Bt bn)	Implied PE-	EPS (Bt)			EPS growth (%)			PE (x)			BPS			PBV (x)			Div. yield			ROE (%)		
							22	23F	24F	22	23F	24F	22	23F	24F	22	23F	24F	22	23F	24F	22F	24F	22	23F	24F	
BGRIM*	OP	46.00	40.50	13.6	106	62.1	-0.5	0.7	1.2	N.A.	N.A.	60	N.A.	55	34	16.2	17.7	20.0	2.5	2.3	2.0	0.8	3.9	-3.0	4.2	5.9	
GPSC*	OP	80.00	69.00	15.9	195	53.2	0.3	1.5	2.1	-88	376	42	218	46	32	40.8	41.8	43.4	1.7	1.7	1.6	1.2	1.2	0.8	3.6	4.9	
GULF*	OP	62.00	52.75	17.5	619	38.8	1.0	1.6	2.0	49	64	25	54	33	26	11.6	12.3	13.3	4.6	4.3	4.0	1.8	2.3	8.4	13.0	15.0	
RATCH*	N	41.00	39.00	5.1	57	11.7	2.7	3.5	4.3	-51	32	22	15	11	9	49.4	51.3	53.9	0.8	0.8	0.7	4.1	4.2	5.4	6.8	7.9	
EGCO*	N	166.00	157.00	5.7	83	10.2	5.1	16.2	17.5	-35	218	8	31	10	9	229.4	238.8	249.6	0.7	0.7	0.6	4.5	4.5	2.2	6.8	7.0	
BCPG*	N	10.40	9.85	5.6	29	18.7	0.9	0.6	0.5	22	-39	-2	11	18	18	10.1	10.2	10.4	1.0	1.0	0.9	3.8	3.9	9.0	5.4	5.2	
BPP*	N	17.00	15.80	7.6	48	14.2	1.9	1.2	1.2	84	-35	3	9	13	13	17.1	17.6	18.1	0.9	0.9	0.9	4.1	4.1	10.9	6.8	6.8	
CKP*	OP	5.60	4.14	35.3	34	19.7	0.3	0.3	0.3	12	-5	1	14	15	14	4.7	4.9	5.1	0.9	0.8	0.8	2.4	2.7	6.4	5.8	5.6	
Sector : Neutral							-20.2	44.5	19.8	33.3	25.0	19.5				1.6	1.5	1.4	2.8	3.3	5.0	6.6	7.3				

Source: KGI Securities Research

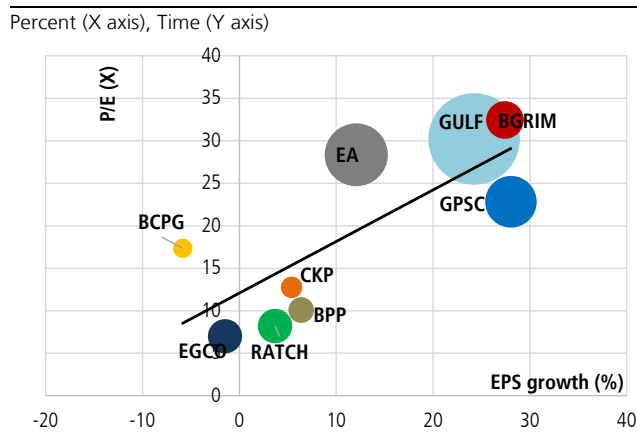
Figure 1: Street's 2023F P/E vs. EPS growth



Source: Bloomberg, KGI Securities Research

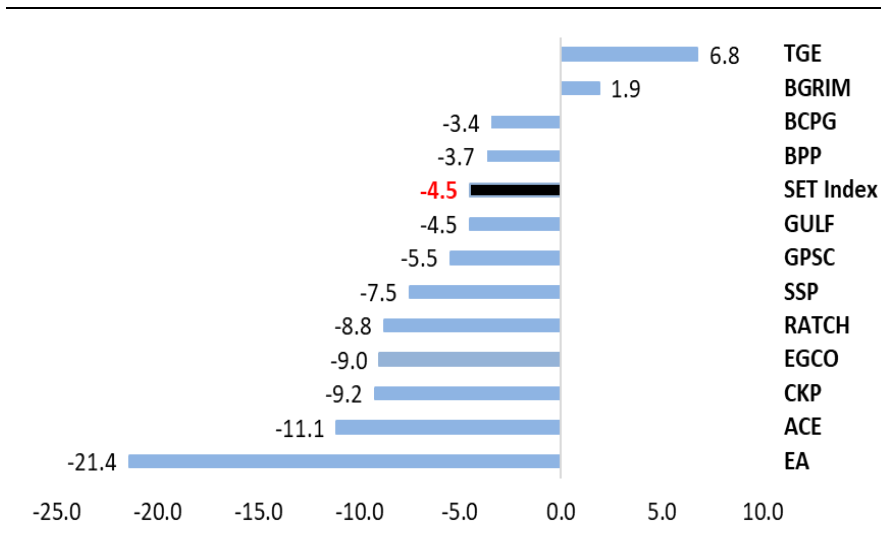
*Note: BGRIM has N.A. growth due to its negative EPS in 2022

Figure 2: Street's 2024F P/E vs. EPS growth



Source: Bloomberg, KGI Securities Research

Figure 3: Sector share prices YTD performances (as of March 23, 2023)



Source: Bloomberg, KGI Securities Research

Energy prices to drop in 2Q23 vs. downward Ft rate – SPP margin still widening

Energy prices. SPP gas price is expected to be stable QoQ in 1Q23F, before a sharp step decline in the next three quarters (2Q-4Q23F), which is positive for those who have projects with adder schemes and high SPPs, i.e., BGRIM, GPSC, and GULF.

We see further downside to our 2023F gas price assumption of Bt470/mmbtu (from Bt495/mmbtu in 2022), possibly down to an average of Bt400-430/mmbtu. This is because Asia LNG JKM has plummeted around 57%YTD to US\$12.6/mmbtu and Erawan gas field is ramping up production. Initially, SPP gas price would range around Bt520/mmbtu in 1Q23, before trending down to Bt420-440 in 2Q23F, Bt375-400 in 3Q23F, and Bt375-380/mmbtu in 4Q24F (Figure 4).

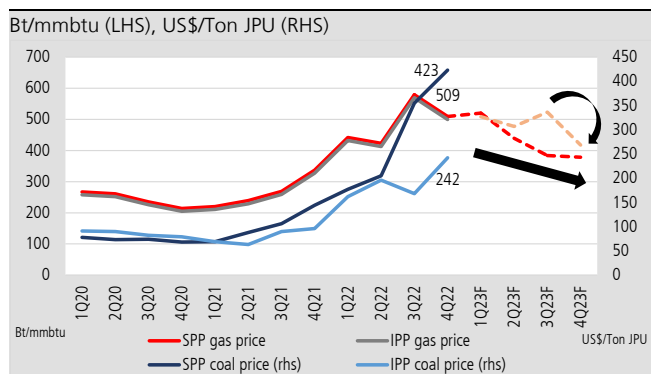
In February 2023, we still see backwardation terms for JKM (gas price benchmark) and ICE Newcastle (coal) forward curve – lower than January 2023’s data – implying a fall in prices in the future contracts (Figure 7).

Ft rate. This time around, it seems like Ft is reversing to downtrend (from expected uptrend) in the next eight months (from May 2023) on a plunge in global LNG prices (Figure 18). On March 22, 2023, Energy Regulatory Commission (ERC) unveiled the final

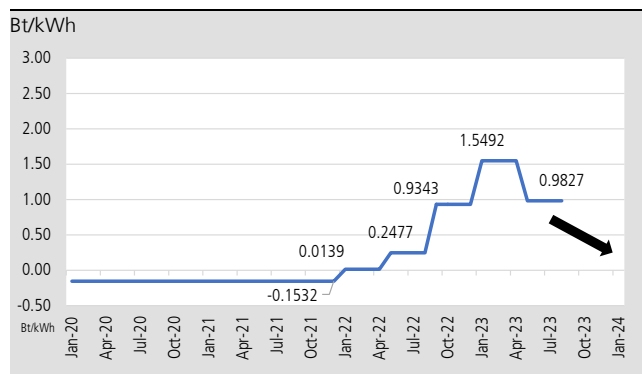
Ft rates for May-August 2023 (4 months) of Ft0.9827/kWh (Ft: +Bt0.0484/kWh) with single tariff Bt4.77/kWh. Hence, we are likely to cut our Ft rate assumptions of Bt2.33/kWh in 2023 and Bt2.70/kWh in 2024.

Our new Ft rate assumptions tend to be an average of Bt1.172/kWh in 2023F on expectation of an unchanged Bt0.9827/kWh in the next round of Ft rate (Sep-Dec 2023) and 2024F.

Net-net, we see 2023F earnings downside of 5-13% to those who have SPPs like GPSC, BGRIM, and GULF (Figure 6), based on our sensitivity analysis and exposure to revenue from power sold to industrial users (Figure 8). Downside would come from lower-than-expected Ft rate, outpacing lower-than-expected gas prices. The Street is likely to tone down its Ft rate and revise gas price assumptions as well.

Figure 4: Gas and coal price movements and forecasts


Source: Company data, KGI Securities Research

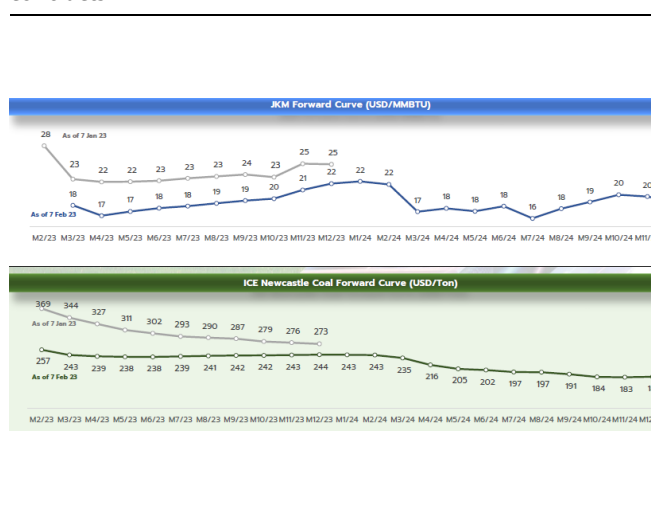
Figure 5: Ft rate to trend down ahead


Source: Company data, KGI Securities Research

Figure 6: Potential downside from our new assumptions on Ft rate and SPP gas prices in 2023F

Company	Rating	TP	23F core profit (Btmn)	Current assumptions		Potential new assumptions		NET IMPACT	
				Ft rate (Bt/kWh)	SPP gas price (Bt/mmbtu)	Ft rate	SPP gas price	23F profit	%
GULF	OP	62.00	18,752	2.34	470	1.17	400	(842)	(4.5)
GPSC	OP	80.00	6,092	2.34	470	1.17	400	(790)	(13.0)
BGRIM	OP	46.00	1,930	2.34	470	1.17	400	(123)	(6.4)

Source: Company data, KGI Securities Research

Figure 7: Forward curve of LNG JKM & ICE Newcastle coal contracts


Source: Company data, KGI Securities Research

Figure 8: Our top 3 stocks: Sensitivity (Ft rate, gas price, and US\$/THB), and revenues from IUs

Company	(+/-) 1 satang/year change in Ft rate
GULF	Bt30-35mn to full-year net profit
GPSC	Bt60mn to full-year net profit
BGRIM	Bt18mn to full-year net profit

Company	(+/-) US\$1/THB change per quarter
GULF	Fx gain/loss of Bt850mn
BGRIM	Fx gain/loss of Bt300mn
GPSC	Fx gain/loss of Bt370mn

Company	(+/-) Bt10/mmbtu change in SPP gas price
GULF	Bt120mn to full-year net profit
GPSC	Bt350mn to full-year net profit
BGRIM	Bt170mn to full-year net profit

Company	IU portion to core revenue
GULF	10-13%
GPSC	22-25%
BGRIM	20-23%

Source: Company data, KGI Securities Research

4Q22 earnings review: Dominated by negative surprises

Full of negatives. Power stocks under our coverage inked an aggregated 4Q22 net profit of Bt4.1bn, significantly below our estimates largely on negative surprises in extra items (led by Electricity Generating (EGCO.BK/EGCO TB)*) and weaker performances (led by RATCH).

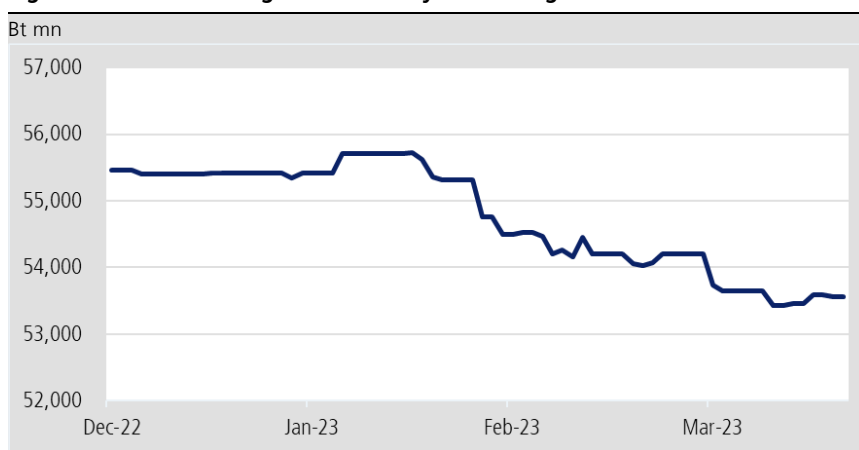
Seeing downgrade flows. Entering 2023, there has been a flow of downgrades (led by GULF, GPSC, and RATCH), down 3% YTD. Our current sector earnings forecast for 2023F is 5% lower than the Bloomberg consensus as we have taken conservative views. We expect to see further downgrade flows from the reversing Ft rate, delayed deal closings, divestment, and weaker operations of some projects. Potential downsides are expected to be seen for RATCH, EGCO, Banpu Power (BPP.BK/BPP TB)*, and CK Power (CKP.BK/CKP TB)*.

Figure 9: Summary of 4Q22 results – well below our and Street’s forecasts

Sector/Stock	4Q22 Earnings (Btmn)					Total revenues (Btmn)			EBIT margin (%)		
	Act	% QoQ	% YoY	Preview	Diff (%)	Act	Preview	Diff (%)	Act	Preview	Diff (ppts)
BGRIM	(545)	N.A.	N.A.	(550)	(1)	14,579	15,932	(8)	0	2	(2.1)
GPSC	(436)	N.A.	N.A.	(495)	(12)	34,839	34,093	2	(2)	(1)	(1.0)
GULF	5,406	398	78	5,455	(1)	26,888	27,002	(0)	20	20	0.0
RATCH	(242)	N.A.	N.A.	1,600	(115)	19,119	18,754	2	5	8	(2.7)
EGCO	(263)	N.A.	N.A.	6,480	(104)	16,947	15,842	7	12	35	(23.7)
CKP	72	(95)	(41)	146	(51)	2,516	2,880	(13)	11	15	(3.2)
BCPG	296	(54)	24	215	38	1,267	1,265	0	47	49	(1.3)
BPP	(180)	N.A.	N.A.	(70)	157	11,308	3,264	246	5	(19)	24.0
Power sector	4,107	(43)	(50)	12,781	(68)	127,463	119,032	7	7.4	11.0	(3.6)

Source: Company data, KGI Securities Research

Figure 10: Sector earnings forecasted by Bloomberg consensus

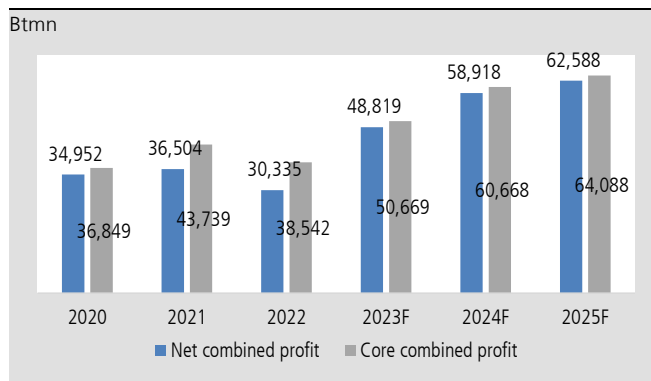


Source: Bloomberg, KGI Securities Research

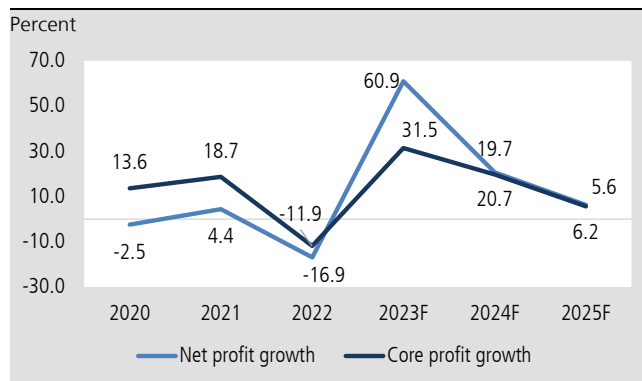
Positive 1# 2023F sector earning to roar back

We expect net combined sector earnings to grow 61% YoY, led by GULF, GPSC, RATCH, and BGRIM with impressive profits from projects in their pipelines. GPSC and BGRIM should see skyrocketing rebounds. Key drivers would be new projects, energy price downturn, higher Ft rate, and cost management. Upside risks are from new M&As, lower energy prices, and lower cost efficiency. We think this positive factor has already been factored into investor expectations to some degree.

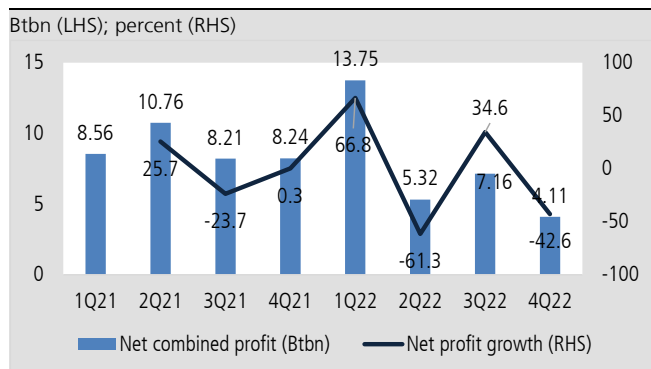
- GULF: GPD Unit 1-2, Jackson, Duqm Phase 2-3 and projects in the pipeline (expect 63% YoY profit growth).
- EA: Higher utilization rate of 1GWh battery plant, greater EV bus sales.
- GPSC and BGRIM: roaring-back earnings from expected fall in SPP gas prices.

Figure 11: Aggregated net and core profits


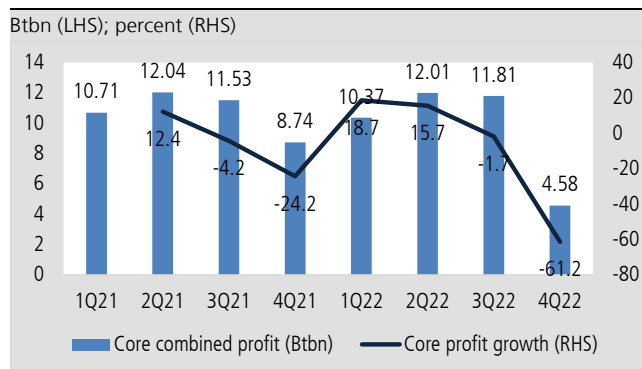
Source: Company data, KGI Securities Research

Figure 12: Net and core profit growths


Source: Company data, KGI Securities Research

Figure 13: Combined quarterly net profit and growth (QoQ)


Source: Company data, KGI Securities Research

Figure 14: Combined quarterly core profit and growth (QoQ)


Source: Company data, KGI Securities Research

Figure 15: 1Q23, 2Q23, and 2023 outlook of the sector

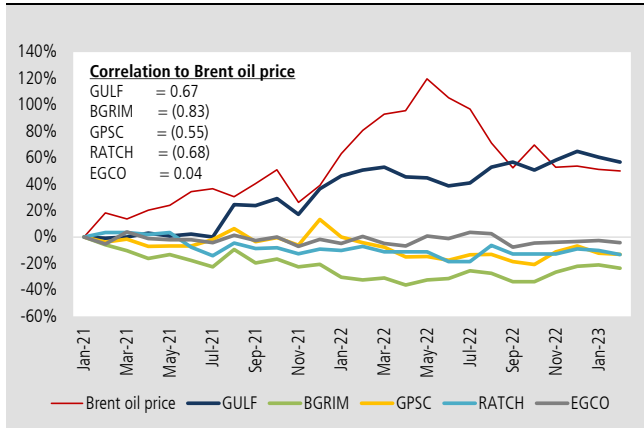
1Q23F		2Q23F		2023F	
Tone	Catalysts	Tone	Catalysts	Tone	Catalysts
Positive	<ul style="list-style-type: none"> 1Q23F aggregated earnings should rise further QoQ largely on a rise in Ft rate vs flatted gas prices, and seasonal factors (lower SG&A & resumption of demand). Demand are likely to roar back after holidays in 4Q22, while some power plants are expected to resume their operations after maintenances. Net profits are likely to turn in positive territory in most companies due to the absence of huge extra items. Stocks - that may provide impressive QoQ rise, would be EGCO (absence of extra items), RATCH (stronger operations), BGRIM (wider margin), GPSC (wider margin), and BPP (stronger CHP and SLG). 	Positive	<ul style="list-style-type: none"> Upbeat momentum. We foresee continued rise in core combined earnings fueled by: a drop of SPP gas prices of Bt440-450/mmbtu (-13-15% QoQ) vs lower Ft rate; new commencing operations of some projects (Jackson, Paiton, GPD, Awaada) This is despite negatives from higher SG&A, some maintenances, and further rise in interest costs. Stocks - which may provide impressive QoQ rise - would be GULF (new capacity and wider margin), followed by BGRIM & GPSC (wider margin) and RATCH We will see the winners of a new round 5.2GWh renewable (SCOD: 2024-30). At a glance, we take side for potential players like GULF under JV with GUNKUL, EA, BGRIM, and GPSC. (Paiton project). 	Positive	<ul style="list-style-type: none"> Catalysts are in our expectation, but far away. We estimate power project bidding related to new PDPs for Thailand and Vietnam - especially renewable. External factors (USD/THB, bond yields, and oil prices) should also reverse, resulting in stronger share price momentum. Also, we foresee a decline in gas and coal prices from 2Q23 with downtrend pattern. Highlighted stocks consist of: <ul style="list-style-type: none"> GULF: GPD Unit1-2, Jackson, Duqm Phase2-3 and projects in the pipeline (an expected +63% YoY profit growth); EA: higher U.rate of 1GWh battery plant, higher EV bus sales; GPSC and BGRIM - roaring-back earnings from expected fall in SPP gas prices

Source: KGI Securities Research

Positive 2# External headwinds (oil prices, US\$/THB, and bond yields) to continue to favor our views

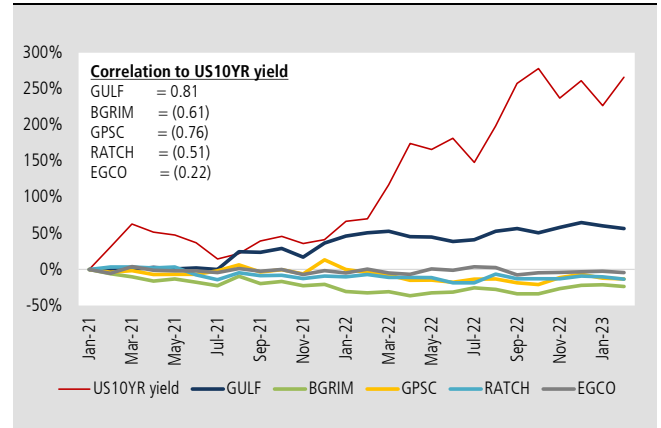
We expect these three external factors to continue to favor our views in 2023. Power stocks normally move against energy costs, US dollar debts, and interest rates. Except for GULF, which has a strong positive correlation to these three factors. Stock prices and opex have the greatest sensitivity to oil price, especially SPPs, followed by US\$/THB and bond yields. We estimate US\$/THB rate to move sideways in 1H23, before appreciating in 2H23.

Figure 16: Correlation of oil price vs. share price changes



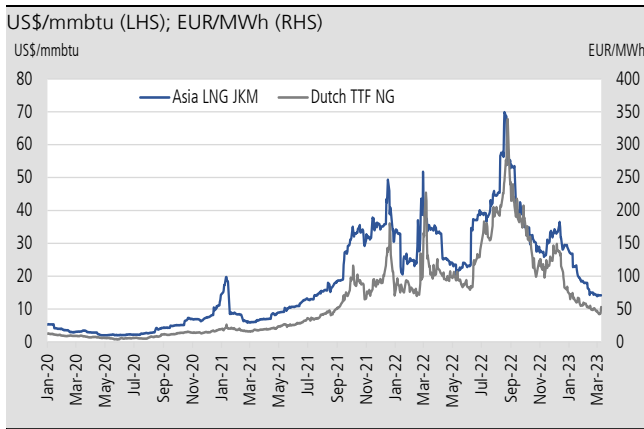
Source: Bloomberg, KGI Securities Research

Figure 17: Correlation of US10YR yield vs. share price changes



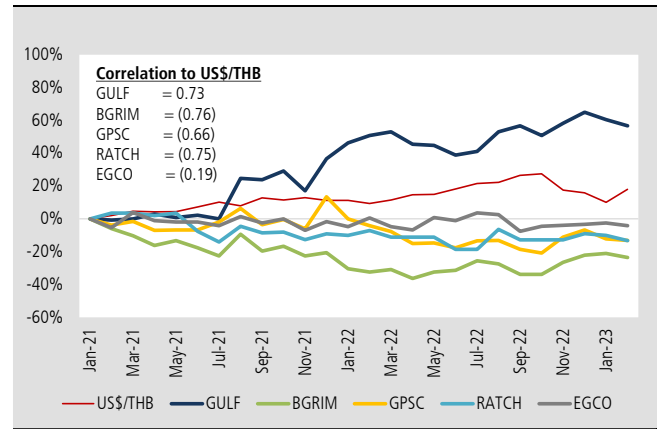
Source: Company data, KGI Securities Research

Figure 18: Asia LNG JKM & Dutch TTF NG prices



Source: Bloomberg, KGI Securities Research

Figure 19: Correlation of US\$/THB vs. share price changes



Source: Company data, KGI Securities Research

Two rounds of renewable energy (RE) projects in Thailand with 8.9GWh (5.2GWh + 3.7GWh)

Aligning with Thailand’s target to hit 50% RE in 2050, ERC is preparing to select power producers to sell clean energy to the government. The 5.2GWh will be operated from 2024-30 with four types (wind, solar, solar + BESS, and biogas). The signing of PPAs is planned for April 19, 2023. ERC is also planning an additional 3.7GWh, the timeline for which will follow the 5.2GWh.

In a nutshell, competition is quite intense as there is overdemand asking for capacity sold. As the winners would have robust expertise and liquidity, we take the side of potential winners like GULF under a JV with Gunkul Engineering (GUNKUL.BK/GUNKUL TB)*, followed by Energy Absolute (EA.BK/EA TB)*, BGRIM, and GPSC.

Large power players would have an edge over peers in bidding, but receive only limited upside due to scattered projects and lower potential returns, especially in Thailand. On the flipside, though small players should have lower winning rates, they would have huge upsides given their small capacities and profit bases.

The upcoming schemes will boost the pie of growth opportunities at home to those who are interested. Still, we doubt the continuity of the project bidding as there will be an election in the near future, resulting in uncertainty on the policies of a new set of authorities.

Figure 20: Overview of 5.2GWh and 3.7GWh RE projects

Type	5.2GWh round	3.7GWh round
Wind	1,500	1,000
Solar farm	2,368	2,632
Solar + BESS	1,000	
Biogas	335	7
Industrial waste		30
Total (MW)	5,203	3,669

Source: KGI Securities Research

Unfavorable weather (warming) in 2023

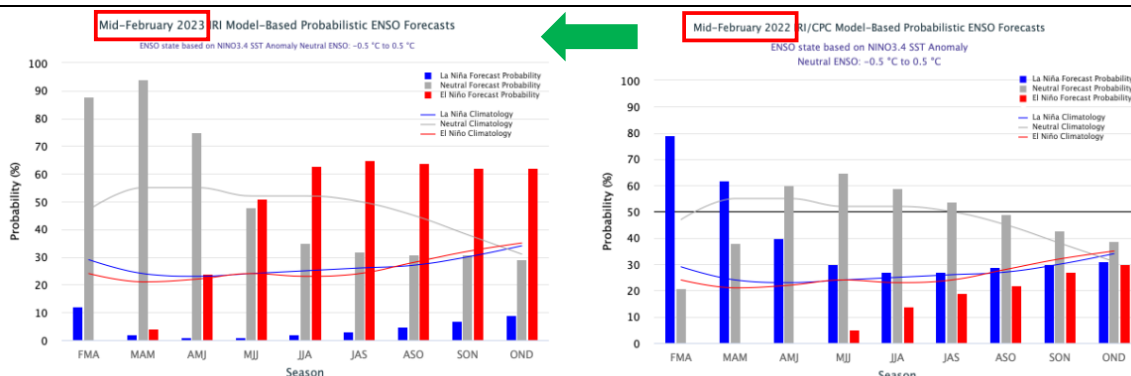
YoY negatives in 2023

Hydropower plants, which benefited from severe La Niña conditions in 2022, may deliver weaker performances YoY (both storage dams and run-of-river types), based on a greater probability of El Niño conditions (higher than the projection in November 2022). CKP should see the most adverse impact from this situation.

The weakest operations in 1Q23 on seasonality

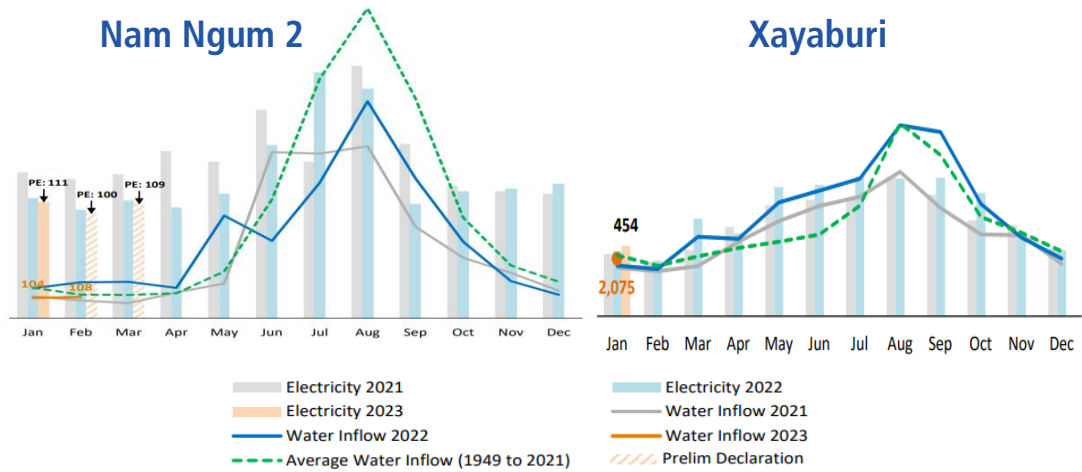
We saw higher YoY water inflow for Xayaburi in January 2023, but Nam Ngum 2 declared lower production both QoQ and YoY on its conservative view.

Figure 21: Foreseeing El Niño (warming) in 2023 (YoY higher red columns) after the severe La Niña conditions in 2022



Source: Columbia Climate School, KGI Securities Research

Figure 22: The weakest performance in 1Q23F on the lowest season and conservative method



Source: CK Power, KGI Securities Research

Corporate Governance Report of Thai Listed Companies



Companies with Excellent CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
AAV	ASIA AVIATION	EGCO	ELECTRICITY GENERATING	PTTEP	PTT EXPLORATION AND PRODUCTION
ADVANC	ADVANCED INFO SERVICE	GFPT	GFPT	PTTGC	PTT GLOBAL CHEMICAL
AMA	AMA MARINE	GGC	GLOBAL GREEN CHEMICALS	PYLON	PYLON
AMATA	AMATA CORPORATION	GPSC	GLOBAL POWER SYNERGY	QH	QUALITY HOUSES
ANAN	ANANDA DEVELOPMENT	HANA	HANA MICROELECTRONICS	RATCH	RATCHABURI ELECTRICITY GENERATING HOLDING
AOT	AIRPORTS OF THAILAND	HMPRO	HOME PRODUCT CENTER	RS	RS
AP	ASIAN PROPERTY DEVELOPMENT	INTUCH	SHIN CORPORATION	SCB	THE SIAM COMMERCIAL BANK
BANPU	BANPU	IRPC	IRPC	SCC	THE SIAM CEMENT
BCP	THE BANGCHAK PETROLEUM	IVL	INDORAMA VENTURES	SCCC	SIAM CITY CEMENT
BCPG	BCPG	KBANK	KASIKORN BANK	SEAFECO	SEAFECO
BDMS	BANGKOK DUSIT MEDICAL SERVICES	KCE	KCE ELECTRONICS	SMPC	SAHAMITR PRESSURE CONTAINER
BEC	BEC WORLD	KKP	KIATNAKIN BANK	SPALI	SUPALAI
BEM	BANGKOK EXPRESSWAY AND METRO	KTB	KRUNG THAI BANK	SPRC	STAR PETROLEUM REFINING
BGRIM	B. GRIMM POWER	KTC	KRUNGTHAI CARD	SVI	SVI
BPP	BANPU POWER	LH	LAND AND HOUSES	TACC	T.A.C. CONSUMER
BTS	BTS GROUP HOLDINGS	LPN	L.P.N. DEVELOPMENT	TCAP	THANACHART CAPITAL
CENTEL	CENTRAL PLAZA HOTEL	MAKRO	SIAM MAKRO	THCOM	THAICOM
CK	CH. KARNCHANG	MBK	MBK	TISCO	TISCO FINANCIAL GROUP
CKP	CK POWER	MINT	MINOR INTERNATIONAL	TOP	THAI OIL
CPALL	CP ALL	MTC	MUANGTHAI CAPITAL	TRUE	TRUE CORPORATION
CPF	CHAROEN POKPHAND FOODS	PLANB	PLAN B MEDIA	TTB	TMBTHANACHART BANK
CPN	CENTRAL PATTANA	PSH	PRUKSA HOLDING	VGI	VGI GLOBAL MEDIA
DELTA	DELTA ELECTRONICS (THAILAND)	PTG	PTG ENERGY	WHA	WHA CORPORATION
DTAC	TOTAL ACCESS COMMUNICATION	PTT	PTT	WHAUP	



Companies with Very Good CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
BAM	BANGKOK COMMERCIAL ASSET MANAGEMENT	GULF	GULF ENERGY DEVELOPMENT	SAPPE	SAPPE
BBL	BANGKOK BANK	JMT	JMT NETWORK SERVICES	SAWAD	SRI SAWAD POWER 1979
CBG	CARABAO GROUP	LPH	LADPRAO GENERAL HOSPITAL	SINGER	SINGER THAILAND
CHG	CHULARAT HOSPITAL	M	MK RESTAURANT GROUP	SPA	SIAM WELLNESS GROUP
COM7	COM7	MAJOR	MAJOR CINEPLEX GROUP	TFG	THAI FOODS GROUP
DOHOME	DOHOME	MEGA	MEGA LIFESCIENCES	TKN	TAOKAENOI FOOD & MARKETING
ERW	THE ERAWAN GROUP	NETBAY	NETBAY	ZEN	ZEN CORPORATION GROUP
GLOBAL	SIAM GLOBAL HOUSE	OSP	OSOTSPA		



Companies with Good CG Scoring

Stock	Company name	Stock	Company name	Stock	Company name
BCH	BANGKOK CHAIN HOSPITAL	ESSO	ESSO (THAILAND)	SF	SIAM FUTURE DEVELOPMENT
BH	BUMRUNGRAD HOSPITAL	HUMAN	HUMANICA	SISB	SISB
EKH	EKACHAI MEDICAL CARE	RBF	R&B FOOD SUPPLY	TPCH	TPC POWER HOLDING

Companies classified Not in the three highest score groups

Stock	Company name	Stock	Company name	Stock	Company name
IIG	I&I GROUP	OR	PTT OIL AND RETAIL BUSINESS	STGT	SRI TRANG GLOVES (THAILAND)
KEX	KERRY EXPRESS (THAILAND)	STEC	SINO-THAI ENGINEERING AND CONSTRUCTION		

Source: www.thai-iod.com

Disclaimer: The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an assessment of operation and is not based on inside information. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date or when there is any change to the relevant information. Nevertheless, KGI Securities (Thailand) Public Company Limited (KGI) does not confirm, verify, or certify the accuracy and completeness of such survey result.

Anti-corruption Progress Indicator

Level 5: Extended

Stock	Company name	Stock	Company name	Stock	Company name
ADVANC	ADVANCED INFO SERVICE	GLOBAL	SIAM GLOBAL HOUSE	QH	QUALITY HOUSES
ANAN	ANANDA DEVELOPMENT	GPSC	GLOBAL POWER SYNERGY	RATCH	RATCHABURI ELECTRICITY GENERATING HOLDING
BBL	BANGKOK BANK	HMPRO	HOME PRODUCT CENTER	ROBINS	ROBINSON DEPARTMENT STORE
BCH	BANGKOK CHAIN HOSPITAL	IRPC	IRPC	SCC	THE SIAM CEMENT
BDMS	BANGKOK DUSIT MEDICAL SERVICES	KBANK	KASIKORN BANK	SIRI	SANSIRI
BIGC	BIG C SUPERCENTER	KCE	KCE ELECTRONICS	SPALI	SUPALAI
CK	CH. KARNCHANG	KKP	KIATNAKIN BANK	STEC	SINO-THAI ENGINEERING AND CONSTRUCTION
DCC	DYNASTY CERAMIC	KTB	KRUNG THAI BANK	TCAP	THANACHART CAPITAL
DELTA	DELTA ELECTRONICS (THAILAND)	LPH	LADPRAO GENERAL HOSPITAL	TISCO	TISCO FINANCIAL GROUP
DRT	DIAMOND ROOFING TILES	PACE	PACE DEVELOPMENT CORPORATION	TMT	THAI METAL TRADE
EGCO	ELECTRICITY GENERATING	PTT	PTT	TOP	THAI OIL
GFPT	GFPT	PTTGC	PTT GLOBAL CHEMICAL		

Level 4: Certified

Stock	Company name	Stock	Company name	Stock	Company name
AAV	ASIA AVIATION	ERW	THE ERAWAN GROUP	SAPPE	SAPPE
AP	ASIAN PROPERTY DEVELOPMENT	GLOW	GLOW ENERGY	SAWAD	SRISAWAD POWER 1979
BA	BANGKOK AIRWAYS	GUNKUL	GUNKUL ENGINEERING	SCB	THE SIAM COMMERCIAL BANK
BANPU	BANPU	ILINK	INTERLINK COMMUNICATION	SCN	SCAN INTER
BCP	THE BANGCHAK PETROLEUM	KTC	KRUNGTHAI CARD	SEAFCO	SEAFCO
BH	BUMRUNGRAD HOSPITAL	LH	LAND AND HOUSES	SVI	SVI
BJCHI	BJC HEAVY INDUSTRIES	LPN	L.P.N. DEVELOPMENT	TASCO	TIPCO ASPHALT
CBG	CARABAO GROUP	MAKRO	SIAM MAKRO	TKN	TAOKAENOI FOOD & MARKETING
CENTEL	CENTRAL PLAZA HOTEL	MALEE	MALEE SAMPRAN	TMB	TMB BANK
CHG	CHULARAT HOSPITAL	MINT	MINOR INTERNATIONAL	TRT	TIRATHAI
CKP	CK POWER	MODERN	MODERNFORM GROUP	TRUE	TRUE CORPORATION
CPF	CHAROEN POKPHAND FOODS	NOK	NOK AIRLINES	TVO	THAI VEGETABLE OIL
CPN	CENTRAL PATTANA	PTTEP	PTT EXPLORATION AND PRODUCTION		
DTAC	TOTAL ACCESS COMMUNICATION	PYLON	PYLON		

Level 3: Established

Stock	Company name	Stock	Company name	Stock	Company name
BEM	BANGKOK EXPRESSWAY AND METRO	MTLS	MUANGTHAI LEASING	SPRC	STAR PETROLEUM REFINING
CPALL	CP ALL	SCI	SCI ELECTRIC		

No progress

Stock	Company name	Stock	Company name	Stock	Company name
AOT	AIRPORTS OF THAILAND	BPP	BANPU POWER	FN	FN FACTORY OUTLET
BPCPG	BPCPG	BTS	BTS GROUP HOLDINGS	TPCH	TPC POWER HOLDING

Source: www.cgthailand.org

Disclaimer: The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by the relevant institution as disclosed by the Office of the Securities and Exchange Commission, is made in order to comply with the policy and sustainable development plan for the listed companies. The relevant institution made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, KGI Securities (Thailand) Public Company Limited (KGI) does not confirm, verify, or certify the accuracy and completeness of the assessment result.

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Outperform (OP)	The stock's excess return over the next twelve months is ranked in the top 40% of KGI's coverage universe in the related market (e.g. Taiwan)..
Neutral (N)	The stock's excess return over the next twelve months is ranked in the range between the top 40% and the bottom 40% of KGI's coverage universe in the related market (e.g. Taiwan)
Under perform (U)	The stock's excess return over the next twelve months is ranked in the bottom 40% of KGI's coverage universe in the related market (e.g. Taiwan).
Not Rated (NR)	The stock is not rated by KGI.
Restricted (R)	KGI policy and/or applicable law regulations preclude certain types of communications, including an investment recommendation, during the course of KGI's engagement in an investment banking transaction and in certain other circumstances. Excess return = 12M target price/current price-
Note	When an analyst publishes a new report on a covered stock, we rank the stock's excess return with those of other stocks in KGI's coverage universe in the related market. We will assign a rating based on its ranking. If an analyst does not publish a new report on a covered stock, its rating will not be changed automatically.

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