EQUITY RESEARCH - REINITIATION REPORT

GULF ENERGY DEVELOPMENT

THAILAND / UTILITIES

ผู้เล่นที่แข็งแกร่งในกลุ่มโรงไฟฟ้า

- เราเริ่ม GULF ด้วยคำแนะนำซื้อที่ราคาเป้าหมาย 52.3 บาท
- เราคิดว่า GULF เป็นหนึ่งในหุ้นโรงไฟฟ้าที่แข็งแกร่งที่สุดโดยมีแนวโน้มที่จะได้รับ ผลกระทบจำกัดจากนโยบายของรัฐบาลใหม่
- ศักยภาพในการเติบโตยังดี เราคิดว่าการที่ราคาหุ้นจะปรับตัวลดลง 19% ในรอบ 1 เดือน เป็นโอกาสที่ดีในการซื้อสะสม

ผลกระทบจำกัดจากนโยบายของรัฐบาลใหม่

แม้ว่านักลงทุนจะมีความกังวลเกี่ยวกับความเป็นไปได้ของนโยบายของผู้นำการจัดตั้งรัฐบาล (พรรคก้าวไกล) ซึ่งเสนอที่จะ ลดค่าเซื้อเพลิง (Ft) และอาจจะการขยายสัญญาซื้อขายไฟฟ้า (PPA) ที่กำลังจะหมดอายุลงเพื่อที่จะลดค่าความพร้อมจ่ายในค่าไฟ เราคิดว่า GULF น่าจะ ได้รับผลกระทบจำกัดจากการลด Ft และไม่ได้รัลผลกระทบจากการขยายสัญญาซื้อขายไฟฟ้า (PPA) เนื่องจากบริษัทฯ เป็นหนึ่งในผู้เล่นที่แข็งแกร่งที่สุดในกลุ่มโรงไฟฟ้า ในฐานะที่เป็น ผู้ผลิตไฟฟ้าขนาดใหญ่ (IPP) ที่มีรายได้ 74% จาก กฟผ. GULF ได้ประโยชน์จากสัญญาซื้อ ขายไฟฟ้าที่ตกลงให้มีการส่งผ่านต้นทุนซึ่งมีอายุเหลือมากกว่า 10 ปีซึ่งหมายความว่า GULF ไม่น่าจะได้รับผลกระทบจากนโยบายขยายสัญญาซื้อขายไฟฟ้า และโดยทั่วไปเราคิดว่าอาจจะ ไม่สมเหตุสมผลในการใช้โรงไฟฟ้าที่หมดอายุอันมีประสิทธิภาพต่ำและใช้พลังงานสูงอาจไม่ ก่อให้เกิดประโยชน์

ศักยภาพการเติบโตน่าจะยังดีอยู่

เราเชื่อว่าศักยภาพการเติบโตของ GULF ยังดีอยู่ จากสัญญาซื้อขายไฟฟ้าที่เซ็นไว้แล้ว เรา คาดว่ากำลังการผลิตติดตั้งตามส่วนการลงทุนของ GULF น่าจะโตดีถึง 6.6% CAGR ในอีก 11 ปีข้างหน้า (2022-2033) เนื่องจากบริษัทฯ ดังเป้าเพิ่มกำลังการผลิตตามส่วนการลงทุนเป็น 10GW ในปี 2033 สัญญาซื้อขายไฟฟ้าใหม่ส่วนมากเป็นของธุรกิจไฟฟ้าซึ่งเป็นธุรกิจหลักอัน ประกอบด้วยโครงการโรงผลิตไฟฟ้าจากก๊าซขนาดใหญ่ (GPD, Hin Kong และ BPP) และ โครงการโรงผลิตไฟฟ้าจากน้ำในลาว อย่างไรก็ดีเราคาดว่าจะเห็นการเติบโตใหม่จากโรงไฟฟ้า พลังงานหมุนเวียนเพิ่มขึ้น จากการประมูลโครงการไฟฟ้าพลังงานหมุนเวียนเอบ 2 ในประเทศ ไทยรวมถึงการซื้อและควบรวมโครงการไฟฟ้าพลังงานหมุนเวียนในต่างประเทศอาทิเช่น สหรัฐฯ และยุโรป จากที่ราคาไฟฟ้าปรับขึ้นในปีนี้และโครงการไหม่เริ่มดำเนินงานเชิงพาณิชย์ เราคาดว่ากำไรต่อหุ้น (EPS) จะโต 29.9% ในปี 2023 และ 21.4% ในปี 2024

Synergies จากธุรกิจอื่นที่ไม่ใช่โรงไฟฟ้า

ในระยะสั้นถึงกลางเราคาดว่า GULF จะได้ประโยชน์จากการลงทุนใน INTUCH ซึ่งให้ 1) Synergies ทางยุทธศาสตร์ทั้งในธุรกิจ Data centre และการเตรียมความพร้อมสำหรับการเปิด เสรีธุรกิจโรงผลิตไฟฟ้าของไทย; และ 2) ผลตอบแทนการลงทุนที่น่าสนใจ (รายได้เงินปันผล 4-5พัน ลบ./ปี) ในระยะยาวเราคิดว่าการพัฒนา LNG terminal น่าจะช่วยเสริมห่วงโช่อุปทาน LNG ของบริษัท ในขณะที่การลงทุนในเทคโนโลยี Blockchain น่าจะช่วยส่งเสริมแนวโน้มการ ซื้อขายแบบ Peer-to-peer Trading ได้ในอนาคต

กลับมาเริ่ม GULF ด้วยคำแนะนำซื้อที่ราคาเป้าหมาย 52.3 บาท

เรากลับมาเริ่ม GULF ด้วยคำแนะนำซื้อที่ราคาเป้าหมาย 52.3 บาท (SoTP) เราประเมินมูลค่า โครงการส่วนมากโดยใช้วิธี DCF (WACC 5.9%) ราคาเป้าหมายของเราคิดเป็น 37.4x ของค่า 2023E P/E (-1SD เมื่อเทียบกับค่าเฉลี่ยระยะยาว) เราคิดว่าราคาหุ้นซึ่งปรับตัวลดลง 19.3% หลังการเลือกตั้งเปิดโอกาสให้นักลงทุนสะสมเมื่อพิจารณาจากปัจจัยพื้นฐานและศักยภาพใน การเติบโตที่ยังดีอย่างต่อเนื่อง.



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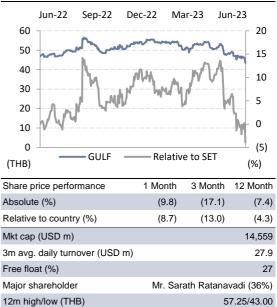
TARGET PRICE	THB52.30
CLOSE	THB43.50
UP/DOWNSIDE	+20.2%
TP vs CONSENSUS	-13.7%

KEY STOCK DATA

GULF TB

YE Dec (THB m)	2022	2023E	2024E	2025E
Revenue	94,151	116,330	133,272	143,316
Net profit	11,418	16,409	19,874	24,883
EPS (THB)	0.97	1.40	1.69	2.12
vs Consensus (%)	-	5.3	(0.2)	4.8
EBITDA	22,767	24,792	27,912	34,130
Core net profit	12,637	16,409	19,874	24,883
Core EPS (THB)	1.08	1.40	1.69	2.12
EPS growth (%)	43.4	29.9	21.1	25.2

Core P/E (x)	40.4	31.1	25.7	20.5
Dividend yield (%)	1.4	1.6	1.9	2.4
EV/EBITDA (x)	28.1	25.8	23.1	19.1
Price/book (x)	4.6	4.2	3.9	3.5
Net debt/Equity (%)	77.2	67.8	60.5	54.0
ROE (%)	12.2	14.2	15.8	17.9



11.733.15

Sources: Bloomberg consensus; FSSIA estimates

Issued shares (m)



PREPARED BY FSS INTERNATIONAL INVESTMENT ADVISORY SECURITIES CO LTD (FSSIA). ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES CAN BE FOUND AT THE END OF THIS REPORT

้บทวิเคราะห์ฉบับนี้แปลมาจากต้นฉบับภาษาอังกฤษ ที่ออกรายงานเมื่อวันที่ 23 มิถุนายน 2023

Investment thesis

As of May 2023, the company had a total gross installed capacity of 11,581 MW, which translates into an equity capacity of 6,088 MW. Independent power producers (IPPs) represent 73% of its capacity, followed by small power producers (SPPs) at 21%, and renewables (6%), which altogether make GULF one of the largest power companies and IPP operators in Thailand.

Consequently, its revenue is highly reliant on EGAT (74% of 2022 total revenue). We view this as GULF's key strength because these earnings are based on energy costs and FX via pass-through PPAs.

Therefore, we believe GULF is the most resilient power plant player among its peers and that it faces limited potential impacts from the new government's policies. We think the recent share price plunge creates an opportunity for investors to accumulate its shares.

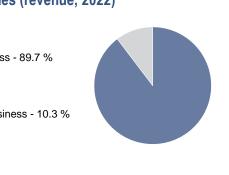
Company profile

GULF is one of the largest power producers in Thailand with expected capacity of over 7.6GW by 2027. It has the largest SPP and IPP portfolio and the strongest earnings growth outlook among the Thai power companies we cover.

www.gulf.co.th

Principal activities (revenue, 2022)

Power business - 89.7 %

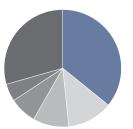


Consulting business - 10.3 %

Source: Gulf Energy Development

Major shareholders

- Mr. Sarath Ratanavadi 35.8 %
- UBS AG/Singapore 12.6 %
- Gulf Capital Holdings Limited -
- 9.9 % Gulf Investment and Trading - 7.5
- Gulf Holding 4.9 %



Source: Gulf Energy Development

Catalysts

Key potential catalysts are 1) the upcoming second round of bidding on 3.6GW in renewable projects; 2) lower energy costs; and 3) new expansion projects and M&As.

Risks to our call

The downside risks to our SoTP-based TP for GULF include 1) a lower-than-expected Ft; 2) a higher-than-expected gas cost; and 3) delays in project commercial operation dates.

Event calendar

Early Aug 20232Q23 financial results announcementEarly Aug 20232Q23 analyst meeting	Date	Event
Early Aug 2023 2Q23 analyst meeting	Early Aug 2023	2Q23 financial results announcement
	Early Aug 2023	2Q23 analyst meeting
Early Nov 2023 3Q23 financial results announcement	Early Nov 2023	3Q23 financial results announcement
Early Nov 2023 3Q23 analyst meeting	Early Nov 2023	3Q23 analyst meeting

Key assumptions

	2022	2023E	2024E	2025E
	(THB/kWh)	(THB/kWh)	(THB/kWh)	(THB/kWh)
GMP's ASP sold to EGAT	3.87	4.33	4.23	4.14
GMP's ASP sold to IU	5.04	4.93	4.82	4.77
IPD's ASP (IPP)	4.70	3.93	3.62	3.32
Ft	0.40	0.89	0.79	0.69
Gas cost (THB/mmbtu)	439	390	370	350

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in gas price, we estimate that 2023 earnings would decline 0.5%, and vice versa, all else being equal.
- For every 1% increase in USD/THB FX rate, we estimate that 2023 earnings would decline 2.8%, and vice versa, all else being equal.
- For every 1% increase in interest rate, we estimate that 2023 earnings would decline 5.9%, and vice versa, all else being equal.

Source: FSSIA estimates

Company profile

Gulf is a holding company with a portfolio of investments in five key businesses including power generation, renewable energy, gas, infrastructure, and digital businesses. However, most of its income comes from gas-fired and renewable power plants that sell electricity to both the public and private sector. GULF actively seeks opportunities to expand both in Thailand and in other countries. The existing overseas projects are in the US, Oman, Vietnam, Germany, and Laos.

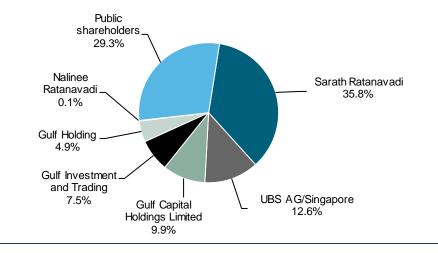
The company was founded in 2007 by major shareholder Mr Sarath Ratanavadi, who holds a 71% stake both directly and indirectly. It became a listed company on the Stock Exchange of Thailand on 6 December 2017.

Exhibit 1: Business portfolio



Note: Data as of February 2023 Source: GULF

Exhibit 2: Shareholding structure



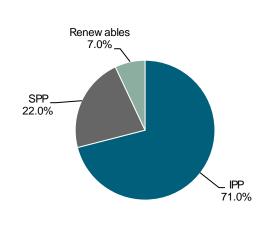
Source: Bloomberg

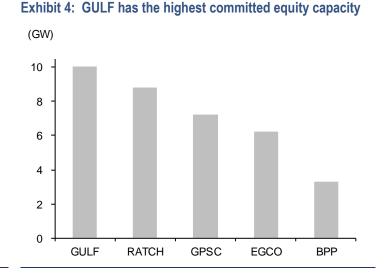
Resilient power plant player

One of the largest IPPs in Thailand

As of May 2023, the company had a total gross installed capacity of 11,581 MW and equity capacity of 6,088 MW. IPPs represent 73% of its capacity, followed by 21% SPPs and 6% renewables, which makes GULF one of the largest power companies and IPPs in Thailand.

Exhibit 3: Gross installed capacity by plant type





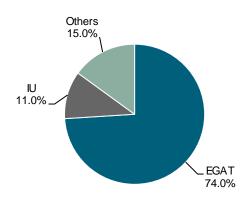
Note: Data as of May 2023 Source: GULF Source: GULF, RATCH, GPSC, EGCO, BPP

74% of revenue from EGAT means energy costs can be passed through

GULF's revenue is highly reliant on EGAT (74% of 2022 total). We view this as its key strength as most of its earnings are based on PPAs which take into account energy costs and FX.

In addition, 11% of revenue in 2022 was from industrial users (IUs) which sell though its 19 SPPs, and selling prices are based on a discounted formula linked to the national grid price, which in turn depends on volatility in the Ft – a variable comprised of energy costs and FX. As movements in the Ft usually lag the actual change in energy costs, this leads to margin squeezes during energy cost uptrends and margin expansion during energy cost downtrends.

Exhibit 5: Revenue breakdown by customers in 2022



Sources: GULF, FSSIA estimates

Limited impact from the new government's policies

Investors wary of post-election uncertainty

Since the election on 14 May 2023, most utility stocks have gone down, including GULF (-19.3% as of 22 June 2023), due to concerns that the new government's policies might impact the sector's earnings and growth potential.

The Move Forward-led coalition has proposed 1) a THB0.7/kWh reduction in the Ft, the formula that determines the cost of electricity that consumers pay which is comprised of variable factors such as energy costs and inflation; 2) renegotiation of PPAs, and potentially extending the contracts of PPAs held by IPPs due to expire within 10 years to reduce availability payments; and 3) breaking up business monopolies in the country.

However, we think GULF will see limited impacts and its earnings will remain resilient relative to its peers. As we mentioned earlier, GULF is one of the largest IPPs in Thailand with 74% of its revenue based on PPAs that allow energy costs to pass through. Thus, even if the Ft is reduced, we expect the company to maintain sturdy earnings.

In addition, a recent report from Green News Agency alleges that Thailand's high electricity prices are in part due to the country's high electricity reserve margin, which results in high availability payments for IPPs that EGAT must pay whether they produce electricity or not. Therefore, the new government has pledged to renegotiate the PPAs, presumably to extend the contract years of those soon to expire to reduce EGAT's availability payment obligations. However, we think this is likely unfeasible because given the recent advances in power generation technology, there may be no benefit to extending the lifespans of mature power plants with low efficiency and high energy consumption. We note that all of GULF's IPP projects have more than 10 years left before their PPAs expire.

Furthermore, current Thailand's electricity reserve margin is at 36%. As Exhibit 6 shows, compared to other countries, this is within the standard range. A higher reserve margin is necessary for countries with a high proportion of renewable capacity due to the intermittent nature of renewable energy sources. Moreover, the current availability payment factored into the electricity price amounts to only THB0.70/kWh out of the current electricity price of ~THB4.67/kWh. In Exhibit 6, we can see that the key factor behind Thailand's high electricity price is mainly from the Ft or energy costs. Hence, availability payments are relatively insignificant compared to other factors when trying to reduce electricity prices.

Exhibit 6: Reserve margin vs % of renewables by country

Country	Reserve margin	% of renewables
	(%)	(%)
Spain	180	45
Italy	136	45
Portugal	130	64
Denmark	130	52
Germany	111	50
Netherlands	93	21
Switzerland	92	78
China	91	33
Australia	65	26
Sweden	57	69
Malaysia	51	26
Thailand	36	30

Sources: EGAT, GULF

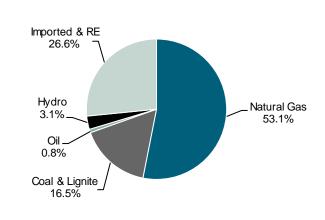
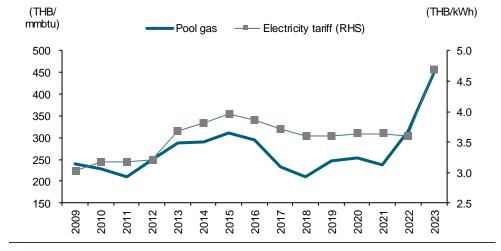


Exhibit 7: Electricity capacity by energy type in 2022

Source: Energy Policy and Planning Office (EPPO)



Exhibit 8: Pool gas price vs electricity tariff



Sources: EPPO, GULF

Recent negative investor sentiment may also be related to GULF's power market dominance, as the Move Forward party has pledged to end monopolies and level the playing field for businesses. Nevertheless, we believe it is too soon to estimate the potential impacts – if any – as this policy is unclear. Moreover, power generation is an open sector with many players, and most projects are awarded following a competitive bidding process.

New growth projects likely to remain intact

Expect projects in the pipeline to proceed unhindered

GULF has a solid growth plan over the next decade, which we believe will be unaffected by the change in Thailand's government. Most of its under-development projects have signed PPAs, with the majority of the new capacity coming from gasfired IPP projects (GPF, Hin Kong, and BPP) and hydropower in Laos. Based on its committed PPAs, GULF's equity installed capacity should record a solid 6.6% CAGR over the next 11 years (2022-2033) as it aims to increase its capacity to 10 GW in 2033.

However, the company is also expanding into infrastructure businesses, including motorways, LNG terminals, container ports and digital infrastructure such as telecommunications, data centres and digital assets (Exhibit 9).

Exhibit 9: Key revenue drivers in 2023

New capacity in 2023						
Projects	Power plant type	Additional capacity (MW)				
GPD	IPP	1,325				
Jackson	Merchant plant	1,200				
DIPWP	Captive	131				
Mekong	Offshore wind	124				
GULF 1	Solar roof	91				
Total		2,871				
Full year project contribution						
Projects						
GSRC Unit 1-4 (2,650MW)	Revenue and profit contribution					
Gulf Gunkul Corporation (177.5 MW)	Share of profit contribution					
Thai Tank Terminal	Share of profit contribution					
тнсом	Revenue and profit contribution					

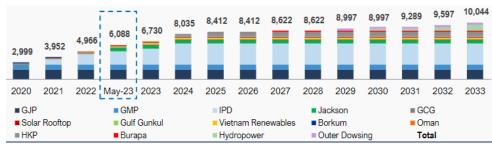
Source: GULF

Exhibit 10: Solid growth plan over the next decade



Source: GULF

Exhibit 11: Equity installed capacity rising at a 6.6% CAGR (2022-2033) based on committed PPAs



Source: GULF

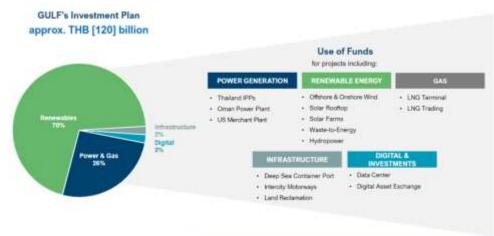
Recently, the company won 1.7MW worth of renewable projects (solar, solar+ESS, and wind) in the first round of bidding offered under Thailand's Power Development Plan (PDP) 2018Rev1. These projects are set to COD from 2024-2030. Projects with expected CODs in 2024-2025 must sign PPAs in July 2023, while the projects scheduled to COD in 2026-2030 must sign PPAs within two years after the announcement in April 2023. We expect these projects can proceed without disruption as the feed-in tariffs (FiT) are fixed at competitive prices (FiT for solar+ESS = THB2.8331/kWh, solar = THB2.1679/kWh, and wind = THB3.1014/kWh) compared to the current electricity price of ~THB4.67/kWh. While no further details on the COD schedules for each project are currently available, we assume the solar projects will roll out between 2024-2030 and the wind projects should commence from 2025-2030. We expect the new projects to contribute a net profit of THB0.3b in 2024 and THB0.7b in 2025, and gradually increase at the same rate until 2030.

More M&As focusing on renewable investments in the next five years

According to GULF's five-year investment plan worth THB120b, its key expansion focus remains the power business with 96% of the budget (70% renewables + 26% gas-fired power plants).

As for renewables in the short term, we expect GULF to add more projects in Thailand from the second round of bidding (total capacity of 3.7GW) regarding PDP2018Rev1. Although we have not included this in our estimates, we think GULF will mostly focus on bidding for solar and wind projects. The results of this new round of bidding should be announced by the end of 2023. Moreover, in the medium to long-term the company is looking for new M&A opportunities for offshore and onshore wind farm projects overseas, mostly in the US and Europe. The budget is also expected to be used for 3.1GW of hydro projects in Laos (Luang Prabang, Pak Lay, and Pak Beng), which are set to COD in May 2030, Mar 2032, and Jan 2033, respectively.





Source: GULF

Exhibit 13: Thailand renewables: Bidding phase 2 based on PDP2018Rev1

COD	2026	2027	2028	2029	2030	Total
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
Solar	232	200	600	800	800	2,632
Wind			200	400	400	1,000
Biogas	7					7
WTE	30					30
Total	269	200	800	1,200	1,200	3,669

Source: Energy Regulatory Commission

Developments beyond power business

GULF's key investments outside the power business are targeting the infrastructure and digital businesses. Although the company's five-year business plan (2023-2027) has set aside just 4% of the total budget (THB4.8b) for infrastructure (2%) and digital business (2%), it currently has sizeable existing and developing projects already underway. For infrastructure projects, these include investments in Thai Tank Terminal (not listed; share acquisition in Dec 2022), Map Ta Phut Port Phase 3 (MTP3, SCOD in 2027), Motorways (M6 and M81, SCOD 2025), and Laem Chabang Port Phase 3 (SCODs in 2026 and 2030). Existing or developing digital-related investments include a 46% stake in Intouch Holdings (INTUCH TB, BUY, TP THB83.50), a major shareholder in AIS - Thailand's largest mobile operator, a 41% stake in Thaicom (THCOM TB, NR), Thailand's only satellite operator, a small stake (0.4%) in Binance US, and a 51% stake in GULF Binance, a JV with Binance Capital Management to establish a digital currency exchange in Thailand.

In the short to medium term, we expect GULF's investment in INTUCH to provide 1) strategic synergies for both its data centre business and preparation for Thailand's power liberalisation; and 2) attractive investment returns based on its high dividend yield (dividend income THB4b-5b/year). As GULF indirectly owns AIS, we think it could leverage the benefit from AIS's extensive fibre and 5G network to develop its data centre business and strengthen the company's preparations for power liberalisation by supporting new technology in the power business (i.e. smart metering).

In the long term, we expect the LNG terminal at MTP3 to enhance its LNG supply chain and support its current LNG import license of 7.8mt. Moreover, with peer-to-peer power trading an undeniable future trend, the company expects its investments in blockchain platforms (Binance) to help the company gain familiarity with this emerging technology.

Exhibit 14: Gas infrastructure business

Fully integrated gas business to supply gas to **GULF's power plants**



7.8 MTPA LNG shipper license

6.4 MTPA under Gulf LNG 1.4 MTPA under Hin Kong Holding

iota:



LNG terminal: up to 10.8 MTPA LNG terminal to COD in 2026 id reclamation in progress)



7.2 MTPA of gas to be supplied to



Currently distribute natural gas to customers in 15 Industrial estate around Thailand

0.6 MTPA of gas poid

Source: GULF

Exhibit 15: Infrastructure projects



Map Ta Phut Port Phase 3 Land reclamation in progress: SCOD in 2024
LNG terminal: SCOD in 2027



Motorways (M6 and M81) OBM of metorways
Mit Bang Pa-In - Nakhon Ratchesima (196 km)
Mit Bang Yai – Kenchanaburi (96 km) Expected SCOD in 2025



Laem Chabang Port Phase 3 Design, build, and O&M of F1 and F2 Terminals Deep-sea container port: >4,000,000 TBU/yr

Expected SCOD in 2026 (F1) and 2030 (F2)

Thai Tank Terminal O&M of terminals and liquid tank farm, and provide public port services for storing and handling liquid products Liquid storage tank capacity: 722,800 m³ Share acquisition In Dec 2022

Source: GULF

JGULF

46.87%

INTOUCH

40.44% AIS

Data Center

Exhibit 16: Digital business projects Investment in INTUCH

Estimated profit sharing from INTUCH: THB 5,000 - 5,500 mm/yr

Patential synergy benefit:
o Data center / Coud computing
Blockchain technology
Virtual banking

Tier 3+ data center in Thailand

· Expected COD in 2025

Dividend forecast: THB 4,000 - \$,000 mm/yr

 Investment in	TH	COM
GULF	:	Satellit (119.58
41.14%		Potenti = Nature - Carter - Low

ite business with 2 new orbital slots E & 78.5E) Potential opportunities in New Space Economy:
Natural resource management.
Carbon footprint monitoring
Low Earth orbit (LEC) satellities
Drone technology

Digital Asset Exchange



 JV between GULF (51%) and Binance (49%) SEC-regulated digital asset exchange and broker Exchange and brokerage licenses expected to be granted in June 2023

Expected to start trading at end of 2023

Source: GULF

Valuation

We reinitiate coverage of GULF with a BUY rating and an SoTP-based target price at THB52.3/shr. We value most of its projects via DCF method with a WACC of 5.9%, based on a 2.7% risk-free rate, risk premium at 8%, and cost of debt at 4%. We have included the market's concerns about rising interest rates with a premium cost of debt from its current rate of 3.8%. FSSIA's target price implies 37.4x 2023E P/E, which is roughly -1SD below its long-term average.

Power and renewable businesses, including both existing projects and those in the pipeline, account for 87% of our target price due to their dominant role in the company's valuation. However, we estimate more upside in the future from infrastructure (i.e. the LNG terminal) and digital businesses (i.e. data centre and blockchain) once the future projects start to generate revenue and unveil potential synergies.

In summary, we believe that GULF faces only limited effects relative to its rivals and that its recent share price activity – down 19.3% – is unjustified based on its intact fundamentals and growth potential. Therefore, we think this creates a buying opportunity.

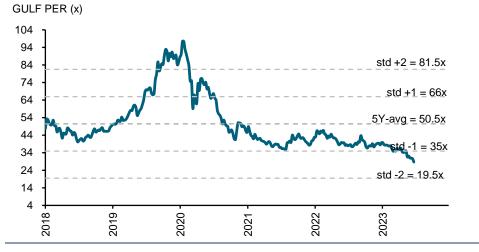
Exhibit 17: SoTP valuation

Cost of equity assumptions	(%)	Cost of debt assumptions	(%)
Risk-free rate	2.7	Pretax cost of debt	4.0
Market risk premium	8.0	Marginal tax rate	20
Stock beta	1.18		
Cost of equity	12	Net cost of debt	3
Weight applied	30	Weight applied	70
WACC (%)	5.9		

SOTP valuation	(THB m)	(THB/share)	Comment
Power generation	395,166	33.7	DCF - WACC 5.9%
Renewables	137,325	11.7	DCF - WACC 5.9%
Gas business	2,981	0.3	1x Book value
Infrastructure	38,655	3.3	DCF - WACC 5.9% and 1x Book value
Digital	140,793	12.0	SoTP
Net debt (2023E)	(101,081)	(8.6)	
Total	613,839	52.3	

Source: FSSIA estimates

Exhibit 18: GULF's P/E band – currently trading below -1SD



Sources: Bloomberg, FSSIA estimates

Exhibit 19: Key valuations of utilities sector companies as of 22 June 2023

Company	BBG	Rec	Share	Target	Up	Market	3Y EPS	P	'E	RC	DE	PE	3V	- EV/ E	BITDA -
			Price	price	side	Сар	CAGR	23E	24E	23E	24E	23E	24E	23E	24E
			(LCY)	(LCY)	(%)	(USD m)	(%)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
Thailand															
Gulf Energy Development	GULF TB	BUY	43.50	52.30	20	14,559	25.3	31.1	25.7	14.2	15.8	4.2	3.9	25.8	23.1
BCPG	BCPG TB	BUY	9.00	15.10	68	747	1.7	15.1	13.2	5.8	6.5	0.9	0.8	11.9	10.9
Energy Absolute	EA TB	BUY	57.00	108.00	89	6,065	25.2	21.6	19.3	22.7	20.9	4.5	3.7	19.6	17.9
Global Power Synergy	GPSC TB	BUY	57.75	76.00	32	4,645	37.5	28.2	22.7	5.5	6.7	1.5	1.5	14.0	13.2
B Grimm Power	BGRIM TB	BUY	35.50	47.00	32	2,640	104.2	34.0	28.2	8.8	9.9	2.9	2.7	10.6	10.3
Ratch Group	RATCH TB	BUY	36.50	57.00	56	2,265	21.7	5.2	4.8	10.0	10.1	0.5	0.5	8.2	7.8
Electricity Generating	EGCO TB	BUY	135.50	200.00	48	2,035	(100.0)	5.8	5.9	9.9	9.1	0.6	0.5	18.4	18.2
Banpu Power	BPP TB	BUY	14.40	18.00	25	1,252	(2.1)	7.3	7.2	11.9	11.2	0.8	0.8	18.4	13.1
CK Power	CKP TB	BUY	3.32	6.50	96	770	10.6	9.8	8.2	10.0	11.1	0.9	0.9	10.0	8.6
Gunkul Engineering	GUNKUL TB	n/a	3.10	n/a	n/a	792	15.1	15.9	15.3	12.2	12.3	1.9	1.8	11.1	11.4
Absolute Clean Energy	ACE TB	n/a	1.91	n/a	n/a	541	33.4	15.1	9.9	9.1	12.2	1.3	1.2	10.6	6.5
Thailand Avg.						36,310	(11.9)	17.2	14.6	10.9	11.4	1.8	1.7	14.4	12.8

Sources: Bloomberg, FSSIA estimates

Key risks

Key risks for the company are 1) efficiency of its power plants; 2) volatility in energy costs; 3) regulatory risks such as government intervention in electricity prices; and 4) FX volatility.

Financial Statements

Gulf Energy Development

Profit and Loss (THB m) Year Ending Dec	2021	2022	2023E	2024E	20255
Revenue	47,467	94,151	116,330	133,272	143,316
Cost of goods sold	(34,388)	(74,711)	(93,076)	(107,448)	(111,934
Gross profit	13,079	19,440	23,254	25,824	31,382
Other operating income	-	-	-	-	
Operating costs	(1,155)	(1,736)	(3,044)	(3,135)	(3,292
Operating EBITDA	16,913	22,767	24,792	27,912	34,130
Depreciation	(4,989)	(5,063)	(4,582)	(5,222)	(6,039
Goodwill amortisation	0	0	0	0	(
Operating EBIT	11,924	17,704	20,210	22,689	28,09
Net financing costs	(6,587)	(8,036)	(8,225)	(8,218)	(8,535) 12,663 12,766
Associates	2,886	6,321	9,160	11,152	
Recurring non-operating income	5,319	7,004	9,259	11,253	
Non-recurring items	(1,142)	(1,219)	0	0	(
Profit before tax	9,514	15,453	21,244	25,725	32,32 ⁻
ax	(347)	(1,344)	(967)	(1,166)	(1,573
Profit after tax	9,167	14,109	20,277	24,559	30,748
/inority interests	(1,497)	(2,691)	(3,868)	(4,685)	(5,865
Preferred dividends	0	0	0	0	(
Other items	-	-	-	-	
Reported net profit	7,670	11,418	16,409	19,874	24,883
Non-recurring items & goodwill (net)	1,142	1,219	0	0	(
Recurring net profit	8,812	12,637	16,409	19,874	24,88
Per share (THB)					
Recurring EPS *	0.75	1.08	1.40	1.69	2.12
Reported EPS	0.65	0.97	1.40	1.69	2.12
DPS	0.44	0.60	0.70	0.85	1.00
Diluted shares (used to calculate per share data)	11,733	11,733	11,733	11,733	11,73
Growth					
Revenue (%)	44.6	98.3	23.6	14.6	7.
Dperating EBITDA (%)	58.5	34.6	8.9	12.6	22.3
Dperating EBIT (%)	64.7	48.5	14.2	12.3	23.8
Recurring EPS (%)	96.8	43.4	29.9	21.1	25.2
Reported EPS (%)	79.1	48.9	43.7	21.1	25.2
Operating performance	10.1	10.0	10.1	21.1	20.1
Gross margin inc. depreciation (%)	27.6	20.6	20.0	10.4	21.0
	27.6	20.6	20.0 23.9	19.4 23.3	21.9 26.1
Bross margin exc. depreciation (%)	38.1	26.0		23.3	
Operating EBITDA margin (%)	35.6	24.2	21.3	20.9	23.8
Dperating EBIT margin (%)	25.1	18.8	17.4	17.0	19.0
Vet margin (%)	18.6	13.4	14.1	14.9	17.4
Effective tax rate (%)	5.2	14.7	8.0	8.0	8.
Dividend payout on recurring profit (%)	58.6	55.7	50.0	50.0	50.
nterest cover (X)	2.6	3.1	3.6	4.1	4.8
nventory days			-	-	
Debtor days	58.6	55.4	63.3	62.1	64.
Creditor days	27.5	27.7	35.0	36.6	38.
Dperating ROIC (%)	(1.9)	(3.1)	(3.7)	(3.8)	(24.3
	(1.3)	(1.5)	(1.7)	(1.8)	(12.7
ROE (%)	11.0	12.2	14.2	15.8	17.9
ROA (%)	3.0	3.5	4.5	5.4	4.
Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)	2021	2022	2023E	2024E	20258
Power business	45,373	84,424	111,069	128,719	141,896
Consulting business	2,094	9,727	5,261	4,553	1,420
Others					

Sources: Gulf Energy Development; FSSIA estimates

Financial Statements

Gulf	Energy	Devel	opment
Ouii	LICIGY	DUVUI	opinion

Cash Flow (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
ecurring net profit	8,812	12,637	16,409	19,874	24,883
epreciation	4,989	5,063	4,582	5,222	6,039
ssociates & minorities	2,886	6,321	9,160	11,152	12,663
ther non-cash items	-	-	-	-	
change in working capital	1,823	(7,112)	1,471	164	(1,669
cash flow from operations	18,510	16,909	31,622	36,413	41,91
Capex - maintenance	(4,285)	(4,320)	(3,997)	(4,580)	(5,330
Capex - new investment	(1,114)	(169)	(11,589)	(16,062)	(20,379
let acquisitions & disposals	(113,494)	(55,360)	0	0	
Other investments (net)	55,878	6,937	9,239	11,233	12,74
Cash flow from investing	(63,015)	(52,913)	(6,346)	(9,409)	(12,963
Dividends paid	(2,933)	(5,163)	(7,040)	(8,205)	(9,937
quity finance	0	0	0	0	
Debt finance	54,256	(7,713)	(22,803)	0	(40 5 44
other financing cash flows	(2,874)	68,226	(14,531)	(17,701)	(19,544
cash flow from financing	48,449	55,351	(44,374)	(25,906)	(29,481
lon-recurring cash flows	- 0	- 0	-	- 0	
Other adjustments	0	0	0 0	0 0	
let other adjustments Iovement in cash	3,944			1,098	
ree cash flow to firm (FCFF)	3,944 (38,909.14)	19,347 (28,352.65)	(19,099) 33,735.91	35,342.68	(528) 37,615.5
ree cash flow to equity (FCFF)	(38,909.14) 6,877.73	(28,352.65) 24,509.10	(12,058.86)	35,342.68 9,302.86	9,409.4
	0,077.73	27,303.10	(12,000.00)	0,002.00	3,409.43
er share (THB)					
CFF per share	(3.32)	(2.42)	2.88	3.01	3.2
CFE per share	0.59	2.09	(1.03)	0.79	0.8
ecurring cash flow per share	1.42	2.05	2.57	3.09	3.7
alance Sheet (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
angible fixed assets (gross)	144,790	121,811	136,811	156,811	181,81
ess: Accumulated depreciation	(14,662)	(22,256)	(26,253)	(30,833)	(36,164
angible fixed assets (net)	130,128	(22,230) 99,555	110,558	125,978	145,64
ntangible fixed assets (net)	18,964	3,873	3,873	3,873	3,87
ong-term financial assets					5,07
nvest. in associates & subsidiaries	- 135,573	- 160,934	- 160,934	- 160,934	160,93
Cash & equivalents	19,847	39,194	20,095	21,194	20,66
/C receivable	9,569	18,999	21,325	23,991	26,85
nventories	0	0	0	0	20,00
Other current assets	9,395	12,057	14,897	17,067	18,35
Current assets	38,811	70,249	56,318	62,251	65,87
Other assets	39,197	83,561	83,561	83,561	83,56
otal assets	362,674	418,172	415,244	436,597	459,89
Common equity	96,596	110,787	120,156	131,826	146,77
/inorities etc.	10,913	25,015	28,882	33,567	39,43
otal shareholders' equity	107,509	135,802	149,039	165,393	186,20
ong term debt	138,761	119,176	119,176	119,176	119,17
Other long-term liabilities	81,387	111,326	111,326	111,326	111,320
ong-term liabilities	220,148	230,502	230,502	230,502	230,50
VC payable	3,080	7,484	9,509	10,985	11,379
Short term debt	12,931	24,803	2,000	2,000	2,000
other current liabilities	19,005	19,581	24,193	27,717	29,80
Current liabilities	35,016	51,868	35,703	40,702	43,18
otal liabilities and shareholders' equity	362,674	418,172	415,244	436,597	459,89
et working capital	(3,121)	3,991	2,520	2,356	4,02
vested capital	320,742	351,914	361,446	376,701	398,04
Includes convertibles and preferred stock which is be	ing treated as debt				
er share (THB)					
ook value per share	8.23	9.44	10.24	11.24	12.5
angible book value per share	6.62	9.11	9.91	10.91	12.1
inancial strength	0.02	5	5.0.		
let debt/equity (%)	122.6	77.2	67.8	60.5	54.
et debt/total assets (%)	36.4	25.1	24.3	22.9	21.
urrent ratio (x)	1.1	25.1	24.3 1.6	1.5	21. 1.
F interest cover (x)	2.2	4.1	0.9	4.1	4.
aluation	2021	2022	2023E	2024E	20251
ecurring P/E (x) *	57.9	40.4	31.1	25.7	20.
ecurring P/E @ target price (x) *	69.6	48.6	37.4	30.9	24.
eported P/E (x)	66.5	44.7	31.1	25.7	20.
ividend yield (%)	1.0	1.4	1.6	1.9	2.
rice/book (x)	5.3	4.6	4.2	3.9	3.
rice/tangible book (x)	6.6	4.8	4.4	4.0	3.
V/EBITDA (x) **	38.6	28.1	25.8	23.1	19.
V/EDITDA (X)					
V/EBITDA @ target price (x) **	44.7	32.7	30.0	26.8	22.1

Sources: Gulf Energy Development; FSSIA estimates



Public disclosures related to sustainable development evaluation of Thai listed companies

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" by the Thai Institute of Directors Association (Thai IOD); 2) "AGM Checklist" by the Thai Investors Association (TIA), a "CAC certified member" of the Thai Private Sector Collective Action Against Corruption (CAC); and 3) Sustainability Investment List (THSI) by the Stock Exchange of Thailand. The ratings are updated on an annual basis. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such ratings.

CG Score by the Thai Institute of Directors Association (Thai IOD)¹

The CG Score indicates corporate governance (CG) strength in the sustainable development of Thai listed companies. Annually, the Thai IOD, with support from the Stock Exchange of Thailand (SET), surveys and assesses the CG practices of companies and publishes the results on the <u>Thai IOD website</u> in a bid to promote and enhance the CG of Thai listed companies in order to promote compliance with international standards for better investment decisions. The results are from the perspective of a third party, not an evaluation of operations, as of the date appearing in the report, and may be changed after that date.

The five underlying categories and weighting used for the CG scoring in 2022 include the rights of shareholders and equitable treatment of shareholders (weight 25% combined), the role of stakeholders (25%), disclosure and transparency (15%), and board responsibilities (35%).

The CGR report rates CG in six categories: 5 for Excellent (score range 90-100), 4 for Very Good (score range 80-89), 3 for Good (Score range 70-79), 2 for Fair (score range 60-69), 1 for Pass (score range 60-69), and not rated (score below 50).

AGM Checklist by the Thai Investors Association (TIA)²

The "<u>AGM Checklist</u>" quantifies the extent to which shareholders' rights and equitable treatment are incorporated into business operations and the extent to which information is sufficiently disclosed and the level of its transparency. All the considered factors form important elements of two out of five the CG components. Annually, the TIA, with support from the SEC, leads the project to evaluate the quality of Annual General Meetings of Shareholders (AGMs) and to rate quality of the meetings.

The <u>Checklist</u> contains the minimum requirements under law that companies must comply with, or best practices according to international CG guidance. Representatives of the TIA will attend the meetings and perform the evaluation. The assessment criteria cover AGM procedures before the meeting (45%), at the meeting date (45%), and after the meeting (10%). The first assesses 1) advance circulation of sufficient information for voting; and 2) facilitating of how voting rights can be exercised. The second assesses 1) the ease of attending meetings; 2) transparency and verifiability; and 3) openness for Q&A. The third involves the meeting minutes that should contain discussion issues, resolutions and voting results.

The results are classified into four categories: 5 for Excellent (score 100), 4 for Very Good (score 90-99), 3 for Fair (score 80-89), and not rated (score below 79).

CAC certified member by the Thai Private Sector Collective Action Against Corruption (CAC)³

A <u>CAC certified member</u> is a listed company whose Checklist satisfies the CAC Certification's criteria and is approved by the CAC Council. The core elements of the Checklist include corruption risk assessment, establishment of key controls, and the monitoring and developing of policies. Note that the CAC does not certify the behaviour of the employees nor whether the companies have engaged in bribery, and Certification is good for three years.

Companies deciding to become a CAC certified member start with by submitting a Declaration of Intent signed by the Chairman of the Board to kick off the 18-month deadline for companies to submit the CAC Checklist for Certification. The 18-month provision is for risk assessment, in place of policy and control, training of managers and employees, establishment of whistleblowing channels, and communication of policies to all stakeholders.

The checklist document will be reviewed by the CAC Certification Committee for adequate information and evidence. It is worth noting that the committee consists of nine professionals in business law, corporate governance, internal audit, financial audit and experienced representatives from certified members.

A passed Checklist will move on to the <u>CAC Council</u> for granting certification approvals. The CAC Council consists of twelve prominent individuals who are highly respected in professionalism and ethical achievements. Among them are former ministers, a former central bank governor, the former head of the Thai Listed Companies Association, Chairman of Anti-Corruption Organizations (Thailand), Chairman of Thai Institute of Directors, and reputable academic scholars.

Sustainability Investment (THSI)⁴ by the Stock Exchange of Thailand (SET)

Thailand Sustainability Investment (THSI) quantifies responsibility in <u>Environmental</u>, and <u>Social</u> issues, by managing business with transparency in <u>G</u>overnance. The THSI serves as another choice for investors who desire to adopt a responsible investment approach, according to the SET.

Annually, the SET will announce the voluntary participation of the company candidates which pass the preemptive criteria, and whose two key crucial conditions are met, i.e. no irregular trading of the board members and executives and a free float of >150 by the number of shareholders, and combined holding must >15% of paid-up capital. Some key disqualifying criteria include a CG score of below 70%; independent directors and free float violation; executives' wrongdoing related to CG, social and environmental impacts, equity in negative territory, and earnings in the red for more than three years in the last five years. To become eligible for THSI, the candidate must pass three indicators in data declaration: Economic (CG, risk management, customer relation management, supply chain management, and innovation); Environmental (environmental management, eco-efficiency, and climate risk); Social (human rights, talent attraction, operational health & safety, community development, and stakeholder engagement); and the incorporation of ESG in business operations.

To be approved for THSI inclusion, verified data must be scored at a 50% minimum for each indicator, unless the company is a part of the Dow Jones Sustainability Indices⁵ (DJSI) during the assessment year. The scoring will be fairly weighted against the nature of the relevant industry and materiality.

Note that, from the <u>THSI list</u>, the SET further developed a sustainability <u>SETTHSI Index</u> in June 2018 from selected THSI companies whose 1) market capitalisation > THB5b (~USD150b); 2) free float >20%; and 3) liquidity >0.5% of paid-up capital for at least 9 out of 12 months. The SETTHSI Index is a market capitalisation-weighted index, cap 5% quarterly weight at maximum, and no cap for number of stocks.

Sources: SEC; Thai IOD; Thai CAC; SET; FSSIA's compilation

Disclaimer:

⁵ Dow Jones Sustainability Indices – <u>Wikipedia</u> – Launched in 1999, DJSI evaluates the sustainability performance of companies based on corporate economic, environmental, and social performance.



Thai Institute of Directors Association (Thai IOD) was established in December 1999 and is a membership organisation that strives to promote professionalism in directorship. The Thai IOD offers directors certification and professional development courses, provides a variety of seminars, forums and networking events, and conducts research on board governance issues and practices. Membership comprises board members from companies ranging from large publicly listed companies to small private firms.

² Thai Investors Association (<u>TIA</u>) was established in 1983 with a mission to promote investment knowledge and to protect the investment rights of Thai investors. In 2002, the association was appointed by the Securities and Exchange Commission (SEC) to represent individual shareholders. To obtain information for evaluation, the association recruits volunteer investors to join AGMs and score the meetings. Weightings for each meeting are at a 45:45:10 ratio. They have been applied since 2017 and subject to change.

³ Thai Private Sector Collective Action against Corruption (<u>CAC</u>) was founded in 2010 and is 100% privately funded. It is an initiative by the Thai private sector to take part in tackling corruption problems via collective action. The CAC promotes the implementation of effective anti-corruption policies in order to create a transparent business ecosystem by developing a unique certification program for large/medium/small companies to apply for and to control corruption risk systematically and efficiently. The CAC's operations are sponsored by the US-based Center for Private Enterprise (CIPE) and the UK Prosperity Fund.

Sustainability Investment List (THSI), created by the Stock Exchange of Thailand in 2015, comprises the listed companies that conduct sustainable business operations.

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Kwanwaree Apichartsataporn FSS International Investment Advisory Securities Co., Ltd

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Company	Ticker	Price	Rating	Valuation & Risks
Gulf Energy Development	GULF TB	THB 43.50	BUY	The downside risks to our SoTP-based TP for GULF include 1) a lower-than-expected Ft; 2) a higher-than-expected gas cost; and 3) delays in project commercial operation dates.
BCPG	BCPG TB	THB 9.00	BUY	The downside risks to our SoTP-based TP include 1) lower-than-expected demand for electricity in Thailand and the Philippines; 2) government intervention; 3) lower-than- expected gas prices in the US and; 4) abnormal solar and wind factors.
Energy Absolute	EA TB	THB 57.00	BUY	Downside risks to our SoTP-based TP include: 1) lower-than-expected demand for electricity in Thailand; 2) lower crude prices; and 3) lower-than-expected demand for batteries.
Global Power Synergy	GPSC TB	THB 57.75	BUY	The downside risks to our SoTP-based TP on GPSC include 1) lower-than-expected demand for electricity in Thailand; 2) a lower crude price; and 3) lower-than-expected demand from industrial users.
B.Grimm Power	BGRIM TB	THB 35.50	BUY	The downside risks to our SoTP-based TP include 1) lower-than-expected demand for electricity in Thailand, 2) a lower crude price, and 3) unplanned shutdowns of its SPPs.
Ratch Group	RATCH TB	THB 36.50	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.
Electricity Generating	EGCO TB	THB 135.50	BUY	Downside risks to our SoTP-based TP include 1) lower-than expected demand for electricity in Thailand; 2) delays in project commencement or commercial operation dates (COD); and 3) government intervention in electricity tariff subsidies.
Banpu Power	BPP TB	THB 14.40	BUY	Downside risks to our SOTP valuation are the start-up delays of its new projects and government intervention in the electricity tariff.
CK Power	СКР ТВ	THB 3.32	BUY	The downside risks to our SoTP-based TP include lower-than-expected demand for electricity in Thailand and lower-than-expected water supply for hydro 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

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 22-Jun-2023 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.