

GULF ENERGY DEVELOPMENT

THAILAND / UTILITIES - CONVENTIONAL

GULF TB

BUY

UNCHANGED

TARGET PRICE	THB60.00
CLOSE	THB49.00
UP/DOWNSIDE	+22.4%
PRIOR TP	THB56.00
CHANGE IN TP	+7.1%
TP vs CONSENSUS	+30.0%

From utility to industry 4.0 growth

- We turn more positive on NP outlook in 2021-23 from strategic moves into utilities and technology-driven diversification.
- GULF has secured 2.2GW from three hydroelectric plants under Thailand's increased Laos power purchase agreement.
- Maintain BUY, with new SoTP-based TP of THB60.

Growth supported by "utility-ICT-industry 4.0" platform

We turn more positive on GULF's net profit growth outlook in 2021-23, given its recent strategic moves into utilities and diversification into technology-driven ventures including telecommunications (via the 42% stake in INTUCH). We upgrade our net profit and EPS forecasts by 6.8-12.9% in 2021-23 to add the higher earnings from SPPs and motorways. We think the potential growth engines under GULF's diversified platform could include: 1) a data centre with Singtel and ADVANC; 2) cloud-based computing; 3) the metaverse; 4) cryptocurrency exchange; 5) blockchain-based energy and power trading; 6) smart home, smart metering, smart grid; 7) financial lending; and 8) an online marketplace.

Cash cows nourish a technology growth bull

We think GULF's "utility-ICT-industry 4.0" (UII) could transform GULF from a big player in Thailand's utilities and infrastructure market into a UII gorilla as the next global transition phase shifts from industry 3.0 to the information-based industry 4.0 world of artificial intelligence (AI), robotics, the metaverse, 5G and cloud-based technology. The UII strategy should allow GULF to leverage its strength in utilities (a highly visible cash cow) to fund growth in its product portfolio (utilities and infrastructure) and add forward integration with ICT to grow cloud and data centre services as a core base for growth. GULF's mix of "old & new" industries, such as utilities, infrastructure, and energy, could be augmented by ICT weapons including 5G, cloud and data centre technologies serving as key platforms – boosted by the growth potential of cryptocurrencies – the metaverse, and blockchain as key drivers for its UII value chain.

Securing three new hydropower plants in Laos

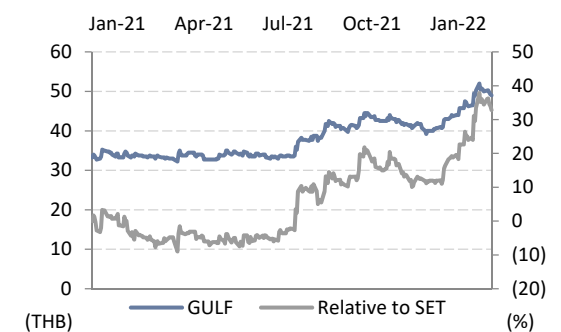
Under Thailand's increased power purchase agreement with Laos from 9GW to 10.5GW, GULF has successfully secured three new hydropower plants – Nam Ngum 3, Pak Beng, and Pak Lay – as its key earnings growth engines post-2026 after it completes 5GW of IPPs in 2024.

Upgrade target price to THB60

We maintain BUY and raise our SoTP-based TP from THB56 to THB60 to reflect: 1) upgrades in our EPS forecasts in 2021-23; 2) the THB4.6/shr value we assign for the three hydropower plants in Laos; and 3) a lower value for its stake in INTUCH to THB8.3.

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	32,827	31,847	74,626	74,808
Net profit	4,282	7,440	13,491	14,768
EPS (THB)	0.36	0.63	1.15	1.26
vs Consensus (%)	-	(6.4)	12.1	(1.4)
EBITDA	10,672	12,178	22,932	24,118
Core net profit	4,478	7,440	13,491	14,768
Core EPS (THB)	0.38	0.63	1.15	1.26
Chg. In EPS est. (%)	-	12.9	6.8	10.1
EPS growth (%)	16.0	66.1	81.3	9.5
Core P/E (x)	128.4	77.3	42.6	38.9
Dividend yield (%)	0.5	0.8	1.4	1.4
EV/EBITDA (x)	62.3	57.4	30.2	28.5
Price/book (x)	9.0	8.4	7.4	6.9
Net debt/Equity (%)	113.1	144.6	112.9	90.5
ROE (%)	8.7	11.2	18.5	18.3



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	11.4	11.4	48.5
Relative to country (%)	12.6	10.3	32.9
Mkt cap (USD m)			17,204
3m avg. daily turnover (USD m)			39.6
Free float (%)			27
Major shareholder	Mr. Sarath Ratanavadi (35%)		
12m high/low (THB)	52.75/31.00		
Issued shares (m)	11,733.15		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

Founded in 2010, GULF is one of Thailand’s pioneer power companies with operations in both small power producers (SPP) and large independent power producers (IPP). A big power company with strong and sustainable earnings growth, GULF is Thailand’s largest power producer with the highest visible earnings growth outlook among the Thai power companies we cover. The key growth drivers include equity capacity growth that we estimate at 18% CAGR to reach 6.3GW by 2024, driven by two growth phases from SPP and IPP projects.

We project that net profits from its 19 SPPs will make up the bulk of GULF’s core net profit in 2021-22 before its new large-scale IPPs come on stream in 2022-25. We believe that GULF will ride Thailand’s SPP growth, based on: 1) higher electricity tariffs on Thailand’s structurally higher tariff rates, driven by the higher commodity prices of coal, gas, and oil; and 2) the solid demand for power and steam from industrial users.

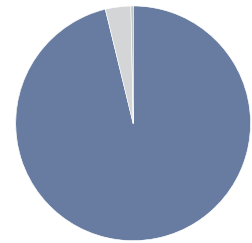
Company profile

GULF is Thailand’s largest power producer 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.

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Principal activities (revenue, 2020)

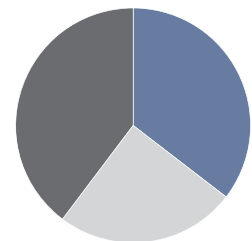
- Power business - 96.8 %
- Consulting business - 3.5 %
- Others - -0.3 %



Source: Gulf Energy Development

Major shareholders

- Mr. Sarath Ratanavadi - 35.4 %
- GULF Capital Holdings Limited - 24.8 %
- Others - 39.7 %



Source: Gulf Energy Development

Catalysts

Higher utilisation rates of power plants and rising demand for electricity in Thailand and Vietnam are key potential growth drivers.

Risks to our call

The downside risks to our SoTP-based TP on GULF include 1) lower-than-expected demand for electricity in Thailand; 2) a lower crude price; and 3) delays in project commercial operation dates.

Event calendar

Date	Event
Feb 2022	4Q21/2021 results announcement

Key assumptions

	2021E	2022E	2023E
Dispatched power (GWh)	17,537	32,848	34,646
Average utilisation rate (%)	83	83	84
No. of Shares at Year End (m shares)	11,733	11,733	11,733

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in gas price, we estimate that 2022 earnings would decline 1.1%, and vice versa, all else being equal.
- For every 1% increase in interest rate, we estimate that 2022 earnings would decline 2.1%, and vice versa, all else being equal.

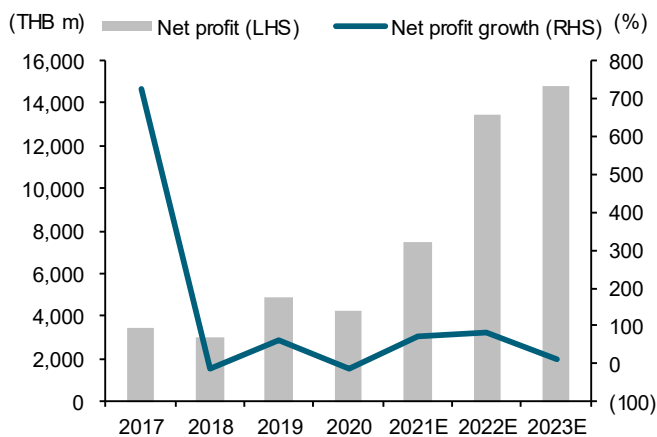
Source: FSSIA estimates

From utility giant to industry 4.0 growth

We turn more positive on GULF's net profit growth outlook in 2021-23, given GULF's recent strategic moves to expand into not only its traditional businesses of utilities and infrastructure but also diversification into other more technology-driven ventures including telecommunications via the acquisition of a 42% stake in Intouch Holdings (INTUCH TB, HOLD, TP THB72), which owns a 40% stake in Advanced Info Service (ADVANC TB, BUY, TP THB260).

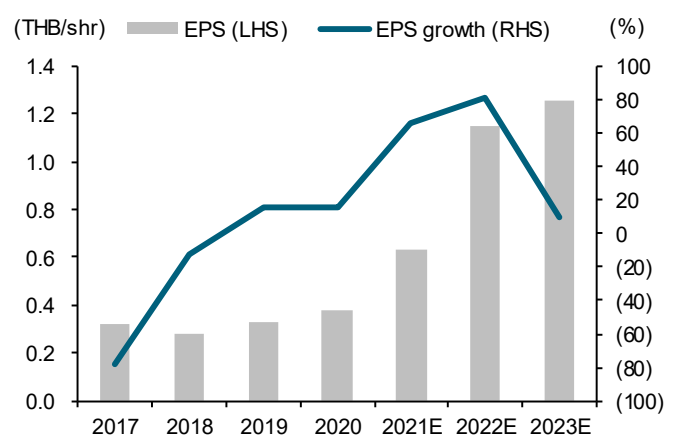
As a result, we upgrade our net profit and EPS forecasts by 6.8-12.9% in 2021-23 to incorporate the earnings from the new hydropower plants and motorway projects. We now project GULF's net profit growth at 73.7% y-y in 2021 and 81.3% y-y in 2022, before softening to 9.5% y-y in 2023 when all four large-scale 1.25GW independent power producer (IPP) projects should be completed and commence their commercial operation dates (COD).

Exhibit 1: Net profit and net profit growth



Sources: GULF; FSSIA estimates

Exhibit 2: EPS and EPS growth

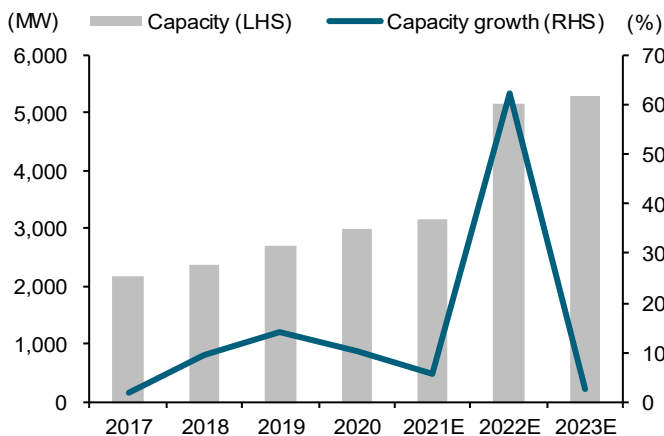


Sources: GULF; FSSIA estimates

In our view, the key drivers would come from GULF's strong capacity growth roadmap in 2021-23, which comes mainly from its 5GW IPP that we expect to COD in 2021-24, and other new projects via acquisitions, mainly renewables overseas. We expect GULF's capacity growth to reach 62.1% y-y in 2022 before normalising to 2.9% y-y in 2023.

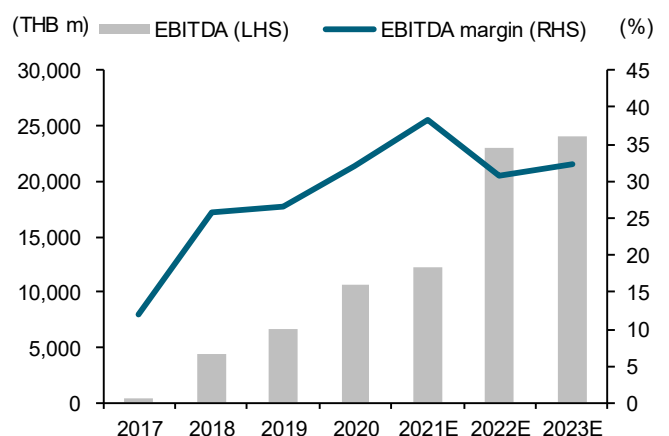
Meanwhile, we expect GULF's EBITDA margin to stay high above 30.5% in 2021-23, supported by the capacity growth of its high-margin renewable power plant projects. This should help sustain GULF's EBITDA margin at 30-35% in 2023 and onward thanks to the growth potential of GULF's multiple new projects with higher EBITDA margins than its incumbent IPPs.

Exhibit 3: Capacity and capacity growth



Sources: GULF; FSSIA estimates

Exhibit 4: EBITDA and EBITDA margin

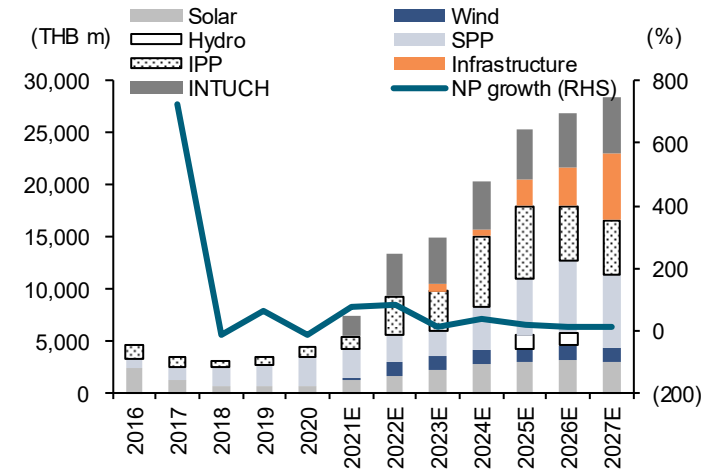


Sources: GULF; FSSIA estimates

Its growth roadmap is well-structured, both in terms of timing to lessen financial constraints, and diversification of the businesses to strengthen the business portfolio, allowing GULF to connect the “old world” industries of utilities and infrastructure with the middle world of telecommunications via its stake in ADVANC.

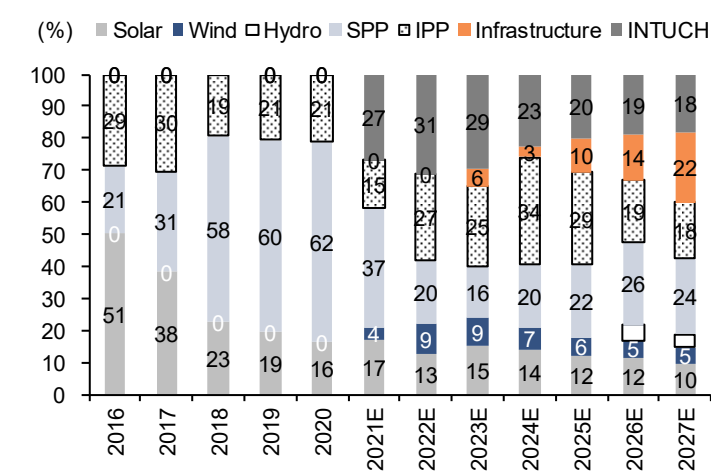
Looking at GULF’s net profit portfolio over the next seven years, we expect GULF’s net profit generated from conventional power segments, including the solar, wind, and hydropower plants that GULF recently acquired stakes in, to decline from 100% of total net profit in 2020 down to 60% by 2027, replaced by the rising net profits from infrastructure (seaport, LNG terminal, motorways) and the dividends from its 42%-owned INTUCH (telecommunications).

Exhibit 5: Net profit breakdown by power plant type



Sources: GULF; FSSIA estimates

Exhibit 6: Net profit breakdown by power plant type (%)

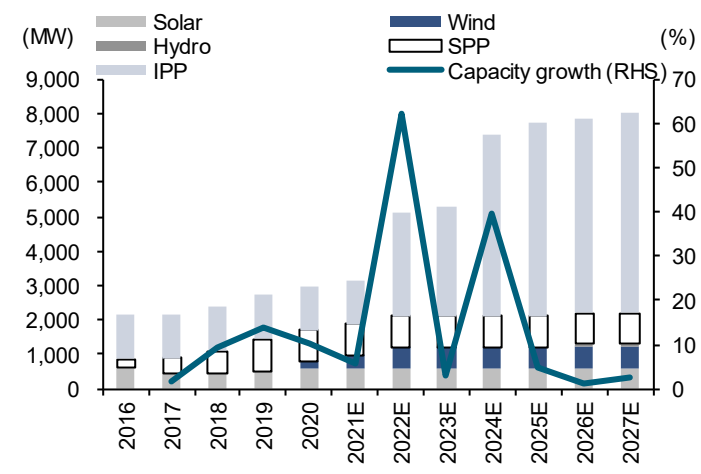


Sources: GULF; FSSIA estimates

We expect the net profit growth outlook from GULF’s committed growth projects to boost its net profit from THB4.5b in 2020 to 20.4b by 2024 and THB30b by 2027, rising over 6x within eight years, mainly driven by the earnings growth from its infrastructure projects post-2024 and the three hydropower plants in Laos post-2026.

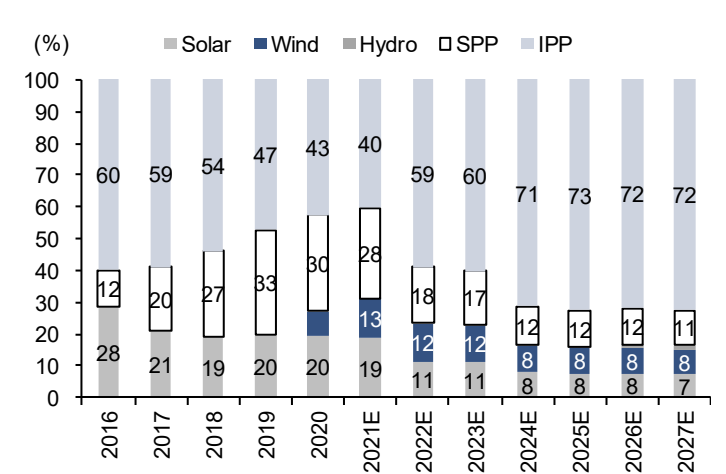
As a result, we project GULF’s earnings to shift from pure power in 2020 to more diversified sources. Earnings from its power portion could drop to 57-73% during 2021-27, with net profits from its infrastructure portion rising from zero in 2020 to 22%, and telecommunications (INTUCH) up from zero in 2020 to 18% by 2027, based on our estimate.

Exhibit 7: Capacity breakdown by power plant type



Sources: GULF; FSSIA estimates

Exhibit 8: Capacity breakdown by power plant type (%)



Sources: GULF; FSSIA estimates

Power capacity growth remains key. Thanks to GULF's well-structured growth portfolio, spanning a 10-year growth period rather than concentrating it within a few years, GULF has been able to fund its multiple growth projects with self-generated internal cash flows plus optimal debt raising to cap its debt to equity at 3x. In 2021-24, the major capex for the four 1.25GW IPPs should be completed, followed by the infrastructure investment in Maptaphut phase 3 and Laemchabang phase 3 post-2024, and the three hydropower plants in Laos in 2026-30.

A stronger and more diversified growth trajectory

In the past 13 months, GULF has continued to pursue its growth strategy via both horizontal and vertical expansion, and organically and inorganically, to not only grow its power and infrastructure capacity but also to diversify into other businesses including cryptocurrency and telecommunications, which are perceived as new territories for GULF, which was formerly perceived as a power and infrastructure-focused company.

Having already expanded beyond utilities and infrastructure into telecommunications, GULF's latest move includes a potential shift into the "new world" industry of cryptocurrency exchange via its memorandum of understanding with Binance (BNB US), the world's largest crypto exchange by trading volume as of end-2021.

Exhibit 9: Growth projects

	Capacity (MW)	Energy	Investment (THB b)	Stake (%)	Equity investment (THB b)	Growth	Time	Certainty	COD	Contract period (year)
Committed growth projects										
Oman										
- Gas-fired power plant	326	Gas	15.0	49	1.6	/	/	/	2021-22E	25
- Water (m3/hour)	1,667	Water		49		/	/	/	2021-22E	25
Vietnam										
- Mekong wind	310	Wind	19.2	95	4.6	/	/	/	2021-23E	20
- Ia Pech 1&2	100	Wind	6.2	100	1.6	/	/	/	2021E	20
Germany										
- Renewable - wind farm	450	Wind	39.2	50	19.6	/	/	/	2021E	20
Thailand										
- Two IPP power plant (GSRC and Gulf PD)	5,300	Gas	100.0	70	25.0	/	/	/	2021-24E	25
- Hin Kong IPP power plant	1,400	Gas	21.0	49	2.6	/	/	/	2024-25E	25
- Burapa IPP power plant	540	Gas	9.7	35	0.9	/	/	/	2027E	25
- WTE	10	WTE	0.2	100	0.2	/	/	/	2025E	20
Laos										
- Nam Ngum	480	Hydro	47.5	20	2.4	/	/	/	2026E	27
- Pak Beng	897	Hydro	78.3	35	6.8	/	/	/	2028E	27
- Pak Lay hydro	770	Hydro	70.4	35	6.2	/	/	/	2030E	27
Infrastructure										
- Laem Chabang deep seaport (m TEU)	4.0	Port	30.0	40	3.8	/	/	/	2024E	35
- Mataphut LNG terminal (mtpa)	10.8	LNG	42.9	70	9.9	/	/	/	2023E/2026E	30
- Motorway (M6 & M81)		Toll	na	40	3.0	/	/	/	2023E	30
- One Bangkok - electricity and water distribution		Electricity & water	3.6	33	0.4	/	/	/	2024E	30
Investment - telecommunication										
INTUCH			70.3	40.0	70.3	/	/	/		
Total			553.5		158.9					

Sources: GULF; FSSIA estimates

A “utility-ICT-industry 4.0” value chain links GULF’s competitive advantages

On the surface, GULF’s growth strategy appears fragmented with no clear strategic direction.

From cash cow to technology growth bull. However, we perceive that GULF’s growth strategy manifests its ambitious vision to grow the company’s earnings via “innovation, energy, and synergy”, increase shareholders’ wealth, and leveraging strengths in its utilities and infrastructure ventures as visible “cash cows” while using its growing net profit and balance sheet to fund future growth projects in telecommunications as a strategic platform (5G-7G technology) to facilitate expansion into the “new world” industries of metaverse, cloud-based data centres and cryptocurrency markets to effectively tap the potential of blockchain technology.

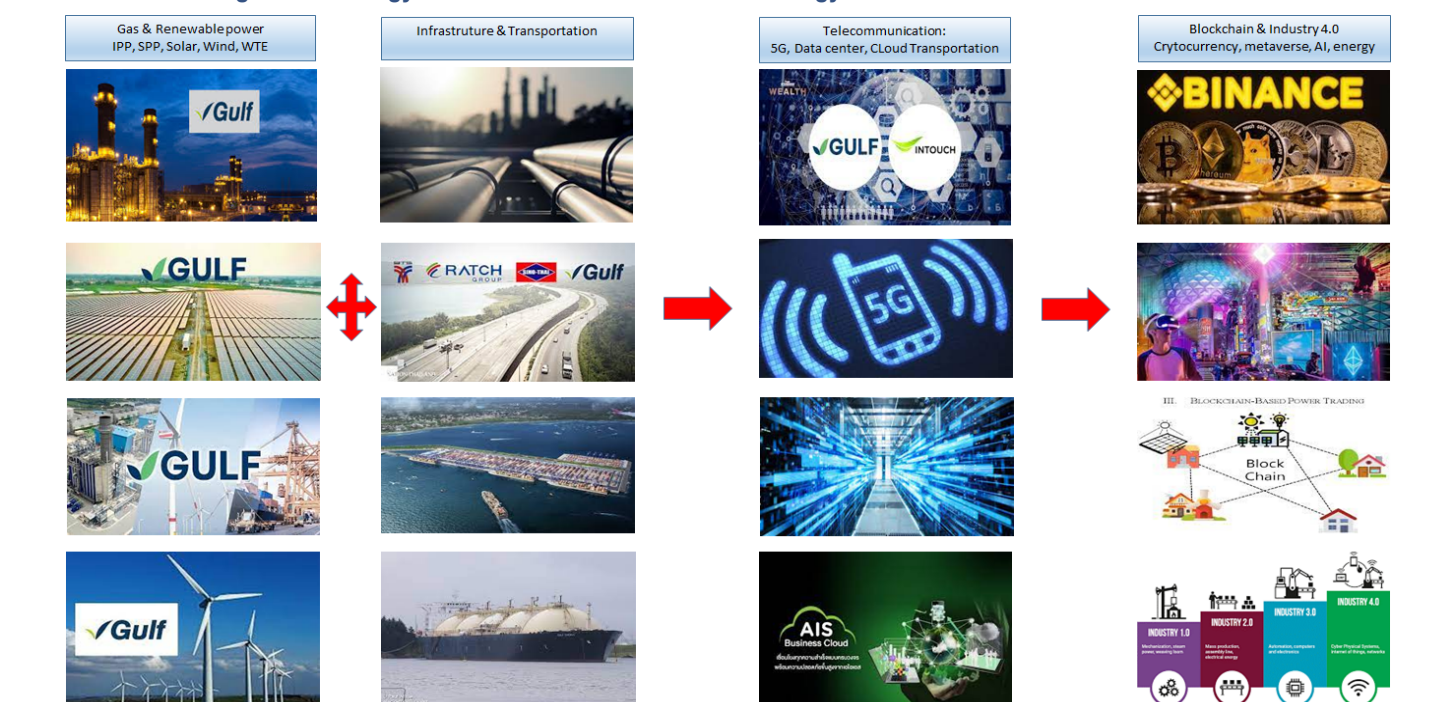
Exhibit 10: Potential growth projects

Potential growth projects	Capacity (MW)	Energy	Investment (THB b)	Stake (%)	Equity investment (THB b)	Growth	Time	Certainty	COD	Contract period (year)
Utilities										
Europe and Asia										
Offshore wind farms	500	Wind	40.0	50	20.0	/			2020E	
Laos										
- Hydropower plant	3,751	Hydro	337.6	30	25.3	/			2026-33E	
Vietnam										
- LNG to power	6,000	Gas	na	30	14.0	/			2025-30E	25
Total	10,251				59.3					
New industry										
Crypto exchange and blockchain						/				

Sources: GULF; FSSIA estimates

We believe GULF’s growth strategy for its unique value chain transformation from “old world” power and infrastructure assets via the “middle world” of telecommunications into the “new world” of cryptocurrency and blockchain technology, is strategically sound and timely, given that utilities are a strategic source of power for the growth platform of all “new world” industries. At the same time, the “middle world” of telecommunications is a prerequisite for entry into the metaverse, blockchain-based ventures, and cryptocurrency.

Exhibit 11: GULF’s growth strategy could see it evolve into a technology and consumer-driven firm



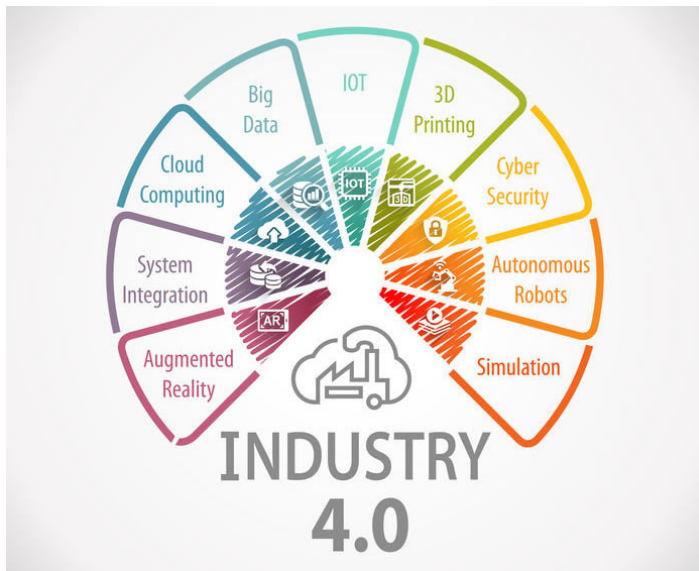
Sources: GULF; ADVANC; BINANCE; FSSIA's compilation

A “utility-ICT-industry 4.0” growth engine. We think GULF’s “utility-information and communications technology (ICT)-industry 4.0” strategy, later called UII, could transform GULF from its current status as a giant in Thailand’s utilities and infrastructure market into a gorilla of UII in the next global transition phase from the information-based industry 3.0 into the next industry 4.0 world of AI, robotics, the metaverse, 5G-7G telecommunications platforms, and cloud-based technologies.

GULF’s UII strategy has been developed essentially to leverage its financial strengths in utilities as a highly visible cash cow for funding growth in its product portfolio (utilities and port, energy, and transportation infrastructure) ahead of forward integration with the telecommunications industry before incorporating cloud, data centres, and 5G-7G platforms as the core base media for establishing a presence in cryptocurrency.

We think the potential growth engines under GULF’s UII platform and ecosystem will embrace: 1) data centres with Singtel and ADVANC; 2) cloud-based computing; 3) the metaverse; 4) cryptocurrency exchange; 5) blockchain-based energy and power trading; 6) smart home, smart metering, smart grid; 7) financial lending; and 8) online marketplaces, to name a few.

Exhibit 12: Key components of Industry 4.0



Source: [CircuitDigest](#)

Exhibit 13: Four industrial revolutions

END OF THE 18 TH CENTURY	START OF THE 20 TH CENTURY	START OF THE 1970S	PRESENT
INDUSTRY 1.0 Mechanization	INDUSTRY 2.0 Electrification	INDUSTRY 3.0 Automatization	INDUSTRY 4.0 Cyber-Physical Systems
Introduced mechanization of production by using water and steam to increase production capacity and productivity, versus manual craft work	Introduced labor-based mass production (assembly lines) powered by electrical energy	Introduced electronics and computers to replace manual work by stand-alone robotic systems	The convergence of physical, digital, and virtual environments through Cyber-Physical Systems (CPS) and the Internet of Things (IoT)
1784 First mechanical loom	1870 First production line, Cincinnati slaughterhouses	1969 First programmable logic controller (PLC), Modicon 084	

Source: [ISAInterchange](#)

We believe that the integration of “old world & new” industries should enable GULF to achieve an asset and net profit growth trajectory well ahead of its competitors over the next 10 years.

Hydro and WTE power plants are the next growth engines in Ull

On 24 Jan-22, GULF entered into the new power segment of waste-to-energy (WTE) by acquiring a 99.99% stake in Chiangmai All Waste To Energy Co, the owner and developer of the waste disposal system of the Chiang Mai Provincial Administrative Organization, which includes a refuse-derivative fuel (RDF) plant for converting municipal solid waste into RDF to be used as a feedstock for the integrated WTE power plant.

While the size of the WTE power plant in Chiang Mai is small at 9.5-9.9MW, based on our estimate, we think GULF is likely to secure additional capacity growth of up to 50-100MW in 2022-23. That's because we expect the Thai government and regulatory bodies to announce a new phase of WTE capacity expansions at many locations amounting to a total of 400MW capacity under the current Power Development Plan 2018 Revision 1.

After successfully securing a 49% stake in the Hin Kong 1.4GW gas-fired IPPs – scheduled to commence their CODs in 2023-24 under PDP 2018 and owned 51% by Ratch Group (RATCH TB, BUY, TP THB60), the project developer – GULF is now seeking more growth from hydropower plants in Laos. The electricity produced in those plants will be sold to Thailand via power purchase agreements (PPA).

Exhibit 14: New MW additions by zone under PDP 2018 Revision 1

Region/Target COD	Power plant	Capacity	Remark
West			
2023E	Hin Kong	700	IPPs/EGAT (replacing TECO)
2024E	Hin Kong	700	IPPs/EGAT (replacing RG TH#1-2)
North			
2026E	Mae Moh	600	Replacement by EGAT
Northeast			
2025E	Nam Phong	650	Replacement by EGAT
2026E	Power import	700	Pak Lay
2028E	Power import	700	Pak Beng
2030E	New bidding	700	IPPs/EGAT
2032E	Power import	700	
2032E	New bidding	700	IPPs/EGAT
2033E	Power import	700	
2035E	Power import	700	
Metropolitan			
2026E	South BKK	700	Replacement by EGAT
2027E	South BKK	1,400	Replacement by EGAT
2028E	North BKK	700	Replacement by EGAT
2035E	North BKK	700	Replacement by EGAT
2036E	New bidding	700	IPPs/EGAT
South			
2027E	Surat Thani	700	Replacement by EGAT
2029E	Surat Thani	700	Replacement by EGAT
2034E	New bidding	1,000	IPPs/EGAT
2035E	New bidding	700	IPPs/EGAT
Upper central			
2032E	New bidding	1,400	IPPs/EGAT
East			
2033E	New bidding	1,000	IPPs/EGAT
2037E	New bidding	700	IPPs/EGAT

Source: PDP 2018

According to the Mekong River Commission (MRC), the estimated hydropower potential of the Lower Mekong Basin (LMB) (excluding China) is 30GW, while that of the Upper Mekong Basin (UMB) is 28.9GW. In the LMB, more than 3,235MW have been realised via facilities built largely over the past 10 years, while projects under construction will represent an additional 3.2GW over the next five years. Laos has completed two dams on the Mekong River, including the 1,285MW Xaiyaburi hydropower plant in Oct-19 and the 260MW Don Sahong hydropower plant in 2019.

Exhibit 15: Potential and operating hydropower plant projects along the Mekong River

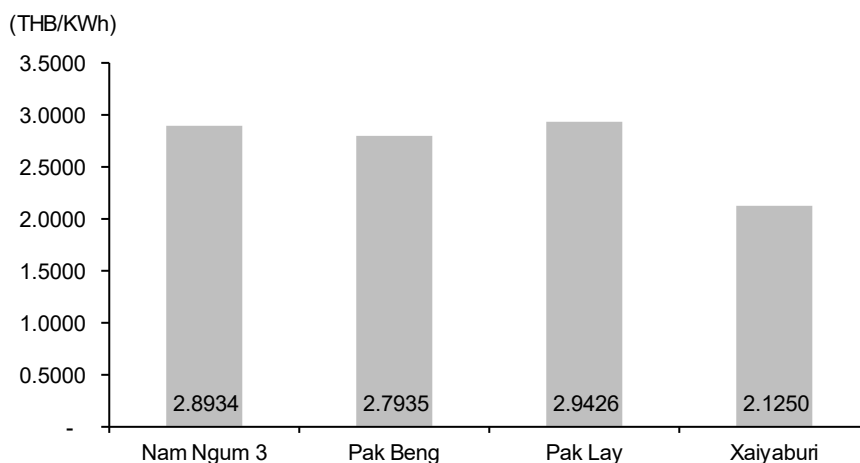
COD	Project	Capacity (MW)	Stake (%)	Equity Capacity (MW)	Investment (USD m)	Status	Key developer		Electricity offtaker
2026E	Nam Ngum 3	480	20	96	1,440	PPA signed Jul-19	EDL, EGATi	Reservoir	90% EGAT/ 10% EDL
2029E	Pak Beng	897	35	314	2,372	Granted tariff	Datang (Lao) Pak Beng Hydropower	Run-of-river	90% EGAT/ 10% EDL
2030E	Pak Lay	770	35	270	2,134	Granted tariff	PowerChina Resources	Run-of-river	na
2032E	Sanakham	684	30	205	2,073	Proposed May-20	Datang Sanakham Hydropower	Run-of-river	na
2033E	Luang Phabang	1,400	30	420	4,200	Proposed Jul-19	PetroVietnam Power	Run-of-river	na
	Total	3,751		1,209					
Hydropower plants in operations on Mekong river									
2019	Xaiyaburi	1,285			4,838	Operating	CK power 37.5%/GPSC 25%/EGCO 15%	Run-of-river	90% EGAT/ 10% EDL
2019	Don Sahong	260			780	Operating	Mega First Corp (Malaysia)	Run-of-river	na

Source: Mekong River Commission (MRC)

To capture the potential capacity growth under PDP 2018, GULF is now planning to secure up to five hydropower plants in Laos, according to management. The first project, the Nam Ngum 3 (NN3) hydropower plant, established by Electricite du Laos (EDL), already secured a PPA with the Electricity Generating Authority of Thailand (EGAT) on 16 Jul-19 and its COD is scheduled for 2026. NN3 is currently owned by EDL, the Chaleun Sekong Group (CSL), and EGAT International (EGATi). GULF acquired a 20% stake from EGATi in 2020. The remaining projects are all run-of-river hydropower plant projects: Pak Beng, Pak Lay, Sanakham, and Luang Phabang, and all have been developed and are owned by Chinese developers with strong business relationships with GULF.

On 5 Nov-21, the Energy Regulatory Commission (ERC) approved the proposal to expand the power purchase from Laos from 9GW to 10.5GW, incorporating three new hydro power plants – Nam Ngum 3, Pak Beng, and Pak Lay – into the PDP 2018 Revision 1. The ERC also granted electricity tariffs of THB2.8934/kWh for Nam Ngum 3, THB2.7935/kWh for Pak Beng, and THB2.9426/kWh for Pak Lay. The approved tariffs include the tariff paid to the producers and the costs of transmission lines and substations related to the import of electricity from the three hydropower plants.

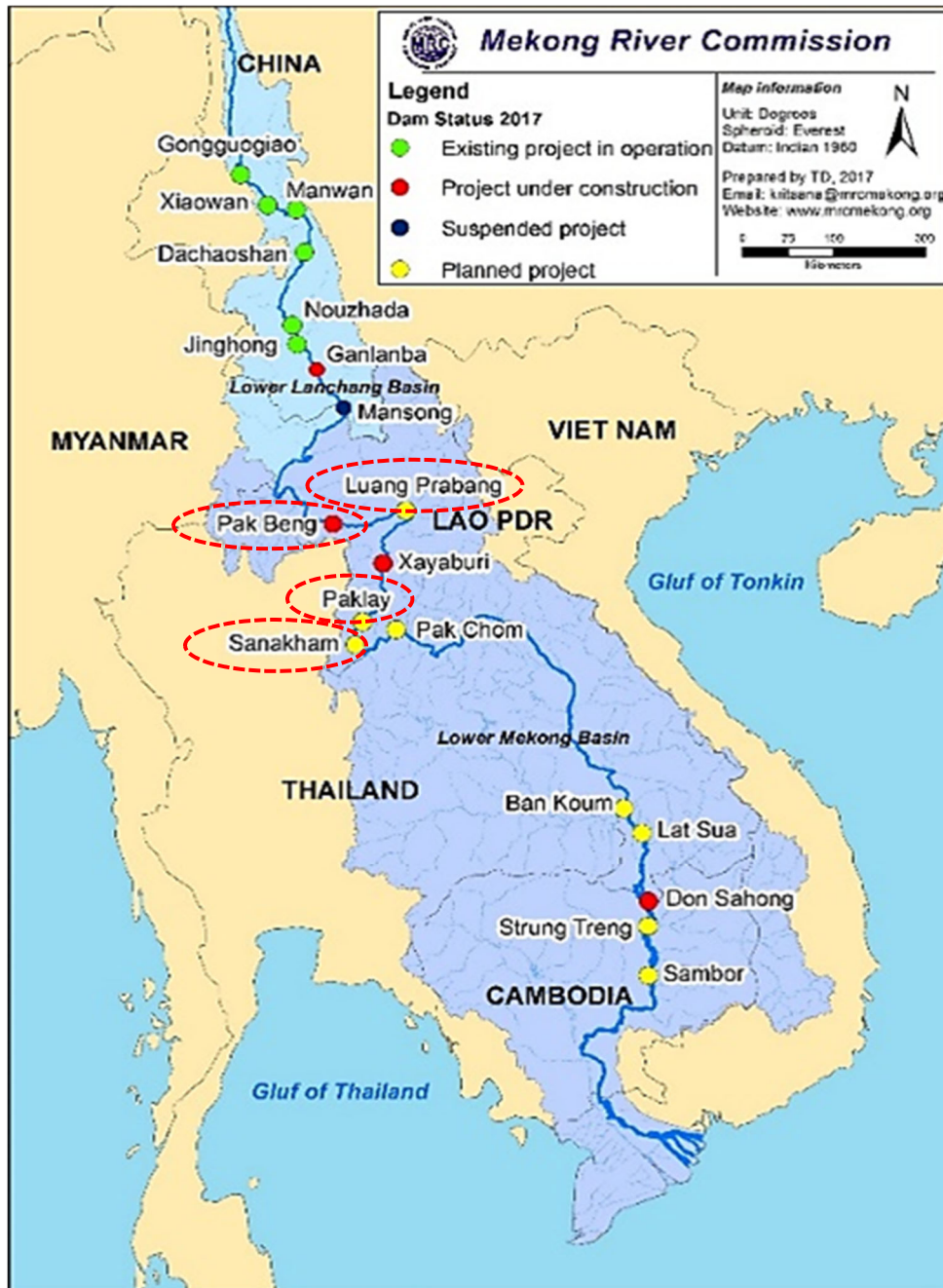
Exhibit 16: Electricity tariff of GULF's three hydropower plants vs Xaiyaburi



Sources: GULF; FSSIA estimates

With a c35% stake potential in each of these four large projects and a 20% stake in NN3, we think that GULF could secure up to 1.1GW of capacity growth, representing 15% of GULF's total equity capacity that we estimate could reach 7GW in 2025.

Exhibit 17: Existing and planned hydropower plant projects in Laos



Source: MRC

We believe the remaining four hydropower plants are likely to be secured by GULF and included into Thailand's PDP 2018, given:

- 1) Hydropower plants are much cleaner than fossil-fuel based gas and coal-fired power plants.
- 2) The reliability of electricity generated by hydropower plants can be significantly improved by using a battery-based energy storage system. Battery costs are projected to sharply decline over the next 10 years.
- 3) The electricity generated from hydropower plants is a good match for the seasonally high demand for electricity in Thailand during Jun-Sep because water flow levels for hydropower plants are higher due to the rainy season.

EPS and target price upgrades

We revised up our EPS forecasts in 2021-23 up by 6.8-12.9% to reflect the higher net profits and higher utilisation rates of small power producer (SPP)s based on similar gains from efficiency improvements at wind farms in Vietnam and Germany.

Exhibit 18: Key changes in assumptions and EPS forecasts

	Current			Previous			Change		
	2021E (THB m)	2022E (THB m)	2023E (THB m)	2021E (THB m)	2022E (THB m)	2023E (THB m)	2021E (%)	2022E (%)	2023E (%)
Revenue	31,847	74,626	74,808	31,847	74,626	74,808	0.0	0.0	0.0
Gross profit	13,771	26,664	27,859	13,771	26,664	27,859	0.0	0.0	0.0
Operating profit	9,129	17,752	18,616	9,129	17,752	18,616	0.0	0.0	0.0
Net profit	7,440	13,491	14,768	6,590	12,632	13,407	12.9	6.8	10.1
EPS (THB/shr)	0.63	1.15	1.26	0.56	1.08	1.14	12.9	6.8	10.1
Key assumptions									
Dispatched power (GWh)	17,537	32,848	34,646	17,537	32,848	34,646	0.0	0.0	0.0
Average utilisation rate (%)	83	83	84	81	82	83	2.5	1.2	1.2
No. of Shares at Year End (m shares)	11,733	11,733	11,733	11,733	11,733	11,733	0.0	0.0	0.0

Note: Change of items in percentage terms are represented in ppt change

Sources: GULF: FSSIA estimates

We maintain BUY and raise our SoTP-based target price from THB56 to THB60 to reflect:

- Our upgrades on EPS forecasts in 2021-23.
- Incorporation of the THB4.6/shr value of the three hydropower plants in Laos, comprising THB0.6/shr for Nam Ngum 3, THB2.2/shr for Pak Beng, and THB1.8/shr for Pak Lay as the ERC has already granted the electricity tariffs and has included the power purchase from these three hydropower plants in its PDP 2018 Revision 1.
- The THB0.9/shr lower value of its stake in INTUCH to THB8.3/shr to reflect our change in methodology from the market price to FSSIA's SoTP-based target price of THB72.
- The change in the value of GULF's stake in SPCG (SPCG TB, not rated) to reflect GULF's recent divestment of its stake in SPCG to reduce GULF's holdings from 10% to 5% at end-2021.

GULF remains our top pick in the Thai utility sector given its strong and visible net profit growth outlook from 2021-30. This is due to GULF's long and large number of committed growth projects in the pipeline, its dynamic growth strategy of not only growing horizontally and vertically but into other related businesses (industry 4.0), and the potential upsides for GULF from the soon-to-be-announced PDP 2022 in Thailand and PDP 7 in Vietnam.

While GULF may suffer from the negative impact of a rising gas price in Thailand, we think the impact will be limited given that GULF's SPPs all have minimal exposure to industrial users. Most of GULF's electricity produced from SPPs is sold to EGAT and the tariffs are fully passed through, similar to IPPs.

Exhibit 19: SoTP-based target price

Cost of equity assumptions		(%)	Cost of debt assumptions		(%)
Risk free rate	2.3		Pretax cost of debt	3.0	
Market risk premium	8.5		Marginal tax rate	20.0	
Stock beta	0.50				
Cost of equity, Ke	6.6		Net cost of debt, Kd	2.1	
Weight applied	0.0		Weight applied	100.0	
WACC	3.0				

DCF valuation estimate	(MW)	(%)	(THB m)	Equity Capacity	(THB/share)	Comments
IPP						
GNS	1,653	40	29,435	661	2.5	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
GUT	1,752	40	40,819	701	3.5	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
GSRC	2,650	70	63,770	1,855	5.4	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
GPD	2,920	70	94,957	2,044	8.1	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Duqm (Oman)	236	45	5,057	106	0.4	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Hin Kong	1,400	49	39,595	686	3.4	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Burapa power	540	35	12,039	189	1.0	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
SPP						
GJP's 7 SPPs	831	40	32,515	332	2.8	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
GMP's 9 SPPs	1,179	53	62,893	619	5.4	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
GMP's 3 SPPs	383	70	19,688	268	1.7	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
CGC (biomass)	25	100	229	25	0.0	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Renewable						
Solar - Thailand	598	75	19,004	449	1.6	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Solar - Vietnam	149	95	1,856	141	0.2	WACC 5%, Risk free rate 6%, Risk premium 6.5%, zero terminal growth
Wind - Vietnam	410	95	17,967	390	1.5	WACC 5%, Risk free rate 6%, Risk premium 6.5%, zero terminal growth
Wind - Germany	450	50	21,739	225	1.9	WACC 4%, Risk free rate 2%, Risk premium 8.5%, zero terminal growth
Nam Ngum 3	480	20	6,573	96	0.6	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Pak Beng	897	35	26,326	314	2.2	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Pak Lay	770	35	20,748	270	1.8	WACC 3.0%, Risk free rate 2.3%, Risk premium 8.5%, zero terminal growth
Infrastructure						
Laemchabang phase 3		40	12,530		1.1	EIRR 10.5%
Maptaphut phase 3		70	165,749		14.1	EIRR 13.6%
Motorway O&M		40	10,853		0.9	EIRR 10%
One Bangkok	240	16	1,362		0.1	EIRR 12%
Investment						
SPCG		5	3,801	15	0.3	At 1.5x FY22E P/BV
INTUCH		42	97,546		8.3	At THB72 target price
Net debt			(103,632)		(8.8)	At end-2022E
Residual ordinary equity			703,420	9,385	60.0	

Sources: GULF; FSSIA estimates

Financial Statements

Gulf Energy Development

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	30,040	32,827	31,847	74,626	74,808
Cost of goods sold	(21,734)	(20,075)	(18,076)	(47,962)	(46,949)
Gross profit	8,306	12,752	13,771	26,664	27,859
Other operating income	-	-	-	-	-
Operating costs	(1,713)	(2,080)	(1,592)	(3,731)	(3,740)
Operating EBITDA	6,593	10,672	12,178	22,932	24,118
Depreciation	(2,434)	(3,431)	(3,049)	(5,180)	(5,503)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	4,159	7,241	9,129	17,752	18,616
Net financing costs	(1,703)	(3,715)	(3,501)	(4,622)	(4,450)
Associates	3,205	2,462	4,060	5,015	5,928
Recurring non-operating income	3,320	2,922	4,080	5,035	5,948
Non-recurring items	1,377	(196)	0	0	0
Profit before tax	7,152	6,252	9,709	18,166	20,113
Tax	14	(107)	(13)	(493)	(968)
Profit after tax	7,166	6,144	9,696	17,673	19,146
Minority interests	(2,280)	(1,862)	(2,256)	(4,182)	(4,378)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	4,887	4,282	7,440	13,491	14,768
Non-recurring items & goodwill (net)	(1,377)	196	0	0	0
Recurring net profit	3,510	4,478	7,440	13,491	14,768
Per share (THB)					
Recurring EPS *	0.33	0.38	0.63	1.15	1.26
Reported EPS	0.46	0.36	0.63	1.15	1.26
DPS	0.26	0.25	0.40	0.70	0.70
Diluted shares (used to calculate per share data)	10,667	11,733	11,733	11,733	11,733
Growth					
Revenue (%)	74.8	9.3	(3.0)	134.3	0.2
Operating EBITDA (%)	49.7	61.9	14.1	88.3	5.2
Operating EBIT (%)	38.1	74.1	26.1	94.5	4.9
Recurring EPS (%)	15.9	16.0	66.1	81.3	9.5
Reported EPS (%)	61.4	(20.3)	73.7	81.3	9.5
Operating performance					
Gross margin inc. depreciation (%)	19.5	28.4	33.7	28.8	29.9
Gross margin of key business (%)	24.1	27.8	33.7	28.8	29.9
Operating EBITDA margin (%)	21.9	32.5	38.2	30.7	32.2
Operating EBIT margin (%)	13.8	22.1	28.7	23.8	24.9
Net margin (%)	11.7	13.6	23.4	18.1	19.7
Effective tax rate (%)	-0.3	2.8	0.2	3.7	6.8
Dividend payout on recurring profit (%)	79.0	65.5	63.1	60.9	55.6
Interest cover (X)	4.4	2.7	3.8	4.9	5.5
Inventory days	-	-	-	-	-
Debtor days	52.9	60.4	67.4	33.5	40.7
Creditor days	24.1	27.7	25.8	16.8	24.6
Operating ROIC (%)	4.6	5.5	(1.2)	(2.1)	(2.2)
ROIC (%)	5.8	5.0	(1.1)	(1.8)	(1.9)
ROE (%)	9.4	8.7	11.2	18.5	18.3
ROA (%)	5.5	4.9	3.5	5.8	5.9
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Power business	30,313	31,772	26,704	69,375	69,557
Consulting business	955	1,154	5,772	5,772	5,772
Others	(1,228)	(99)	(629)	(521)	(521)

Sources: Gulf Energy Development; FSSIA estimates

Financial Statements

Gulf Energy Development

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	3,510	4,478	7,440	13,491	14,768
Depreciation	2,434	3,431	3,049	5,180	5,503
Associates & minorities	3,205	2,462	4,060	5,015	5,928
Other non-cash items	-	-	-	-	-
Change in working capital	(6,473)	2,798	(762)	7,807	(1,533)
Cash flow from operations	2,676	13,169	13,787	31,494	24,665
Capex - maintenance	(2,410)	(3,152)	(3,226)	(4,256)	(3,805)
Capex - new investment	(13,320)	(49,037)	(38,313)	(11,321)	(462)
Net acquisitions & disposals	(1,209)	(832)	0	0	0
Other investments (net)	11,701	433	4,059	5,013	5,926
Cash flow from investing	(5,239)	(52,588)	(37,480)	(10,564)	1,659
Dividends paid	(2,133)	(2,773)	(2,933)	(4,693)	(8,213)
Equity finance	0	0	0	0	0
Debt finance	5,584	27,702	23,017	(2,000)	0
Other financing cash flows	(3,196)	16,003	(5,863)	(5,847)	(7,475)
Cash flow from financing	254	40,932	14,221	(12,540)	(15,689)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(2,309)	1,513	(9,472)	8,390	10,636
Free cash flow to firm (FCFF)	332.82	(35,753.90)	(19,714.74)	25,809.19	31,367.02
Free cash flow to equity (FCFE)	(175.27)	4,285.96	(6,538.50)	13,083.28	18,848.72

Per share (THB)	2019	2020	2021E	2022E	2023E
FCFF per share	0.03	(3.05)	(1.68)	2.20	2.67
FCFE per share	(0.01)	0.37	(0.56)	1.12	1.61
Recurring cash flow per share	0.86	0.88	1.24	2.02	2.23

Balance Sheet (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Tangible fixed assets (gross)	85,190	139,958	181,673	196,326	198,896
Less: Accumulated depreciation	(4,229)	(10,240)	(13,466)	(17,722)	(21,527)
Tangible fixed assets (net)	80,961	129,718	168,208	178,605	177,369
Intangible fixed assets (net)	1,113	17,354	17,354	17,354	17,354
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	21,247	22,079	22,079	22,079	22,079
Cash & equivalents	14,390	15,902	6,431	14,821	25,456
A/C receivable	5,199	5,660	6,108	7,601	9,097
Inventories	0	0	0	0	0
Other current assets	2,828	8,792	8,529	19,986	20,035
Current assets	22,417	30,354	21,068	42,408	54,588
Other assets	8,540	46,075	46,075	46,075	46,075
Total assets	134,278	245,580	274,784	306,520	317,465
Common equity	38,427	64,027	68,534	77,331	83,885
Minorities etc.	10,613	8,053	10,309	14,491	18,869
Total shareholders' equity	49,040	72,080	78,842	91,822	102,754
Long term debt	66,453	83,544	116,453	116,453	116,453
Other long-term liabilities	8,976	60,314	60,314	60,314	60,314
Long-term liabilities	75,429	143,858	176,767	176,767	176,767
A/C payable	1,689	1,353	1,207	3,202	3,135
Short term debt	3,281	13,892	4,000	2,000	2,000
Other current liabilities	4,838	14,397	13,967	32,729	32,808
Current liabilities	9,809	29,643	19,174	37,931	37,943
Total liabilities and shareholders' equity	134,278	245,581	274,784	306,520	317,465
Net working capital	1,500	(1,298)	(537)	(8,344)	(6,811)
Invested capital	113,360	213,928	253,179	255,768	256,065

* Includes convertibles and preferred stock which is being treated as debt

Per share (THB)	2019	2020	2021E	2022E	2023E
Book value per share	3.60	5.46	5.84	6.59	7.15
Tangible book value per share	3.50	3.98	4.36	5.11	5.67

Financial strength	2019	2020	2021E	2022E	2023E
Net debt/equity (%)	112.9	113.1	144.6	112.9	90.5
Net debt/total assets (%)	41.2	33.2	41.5	33.8	29.3
Current ratio (x)	2.3	1.0	1.1	1.1	1.4
CF interest cover (x)	8.7	15.4	10.1	6.3	5.3

Valuation	2019	2020	2021E	2022E	2023E
Recurring P/E (x) *	148.9	128.4	77.3	42.6	38.9
Recurring P/E @ target price (x) *	182.3	157.2	94.6	52.2	47.7
Reported P/E (x)	107.0	134.3	77.3	42.6	38.9
Dividend yield (%)	0.5	0.5	0.8	1.4	1.4
Price/book (x)	13.6	9.0	8.4	7.4	6.9
Price/tangible book (x)	14.0	12.3	11.2	9.6	8.6
EV/EBITDA (x) **	89.3	62.3	57.4	30.2	28.5
EV/EBITDA @ target price (x) **	107.1	74.4	68.0	35.8	33.8
EV/invested capital (x)	5.2	3.1	2.8	2.7	2.7

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: Gulf Energy Development; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCG	SCG	SCN	SDC
SEAFCO	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TRC	TSC	TSR	TSTE	TSTH
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

Disclaimer:

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* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									

DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute 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 Thaipat Institute that is 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, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Suwat Sinsadok, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

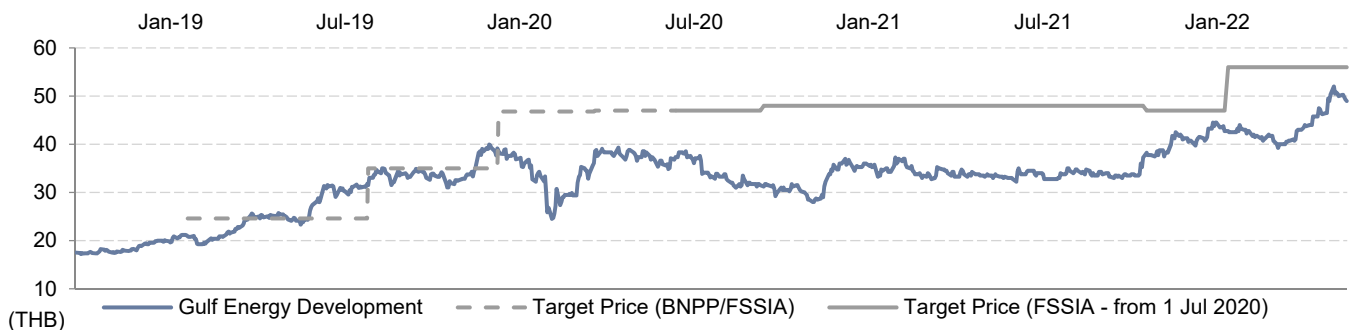
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

Gulf Energy Development (GULF TB)



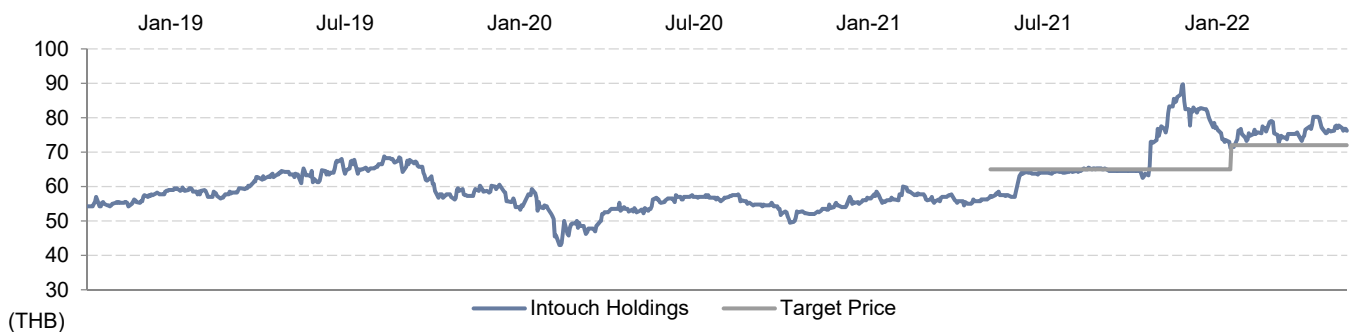
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
08-May-2019	BUY	24.60	22-Apr-2020	BUY	47.00	15-Oct-2021	BUY	56.00
10-Oct-2019	BUY	35.00	11-Sep-2020	BUY	48.00			
30-Jan-2020	BUY	46.80	06-Aug-2021	BUY	47.00			

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 30-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

Intouch Holdings (INTUCH TB)



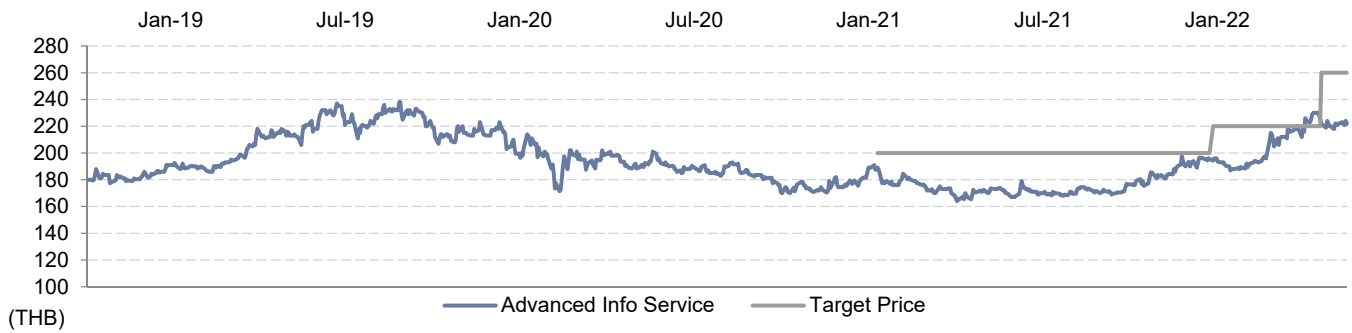
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
24-Mar-2021	BUY	65.00	05-May-2021	HOLD	65.00	19-Oct-2021	HOLD	72.00

Naruedom Mujjalinkool started covering this stock from 24-Mar-2021

Price and TP are in local currency

Source: FSSIA estimates

Advanced Info Service (ADVANC TB)



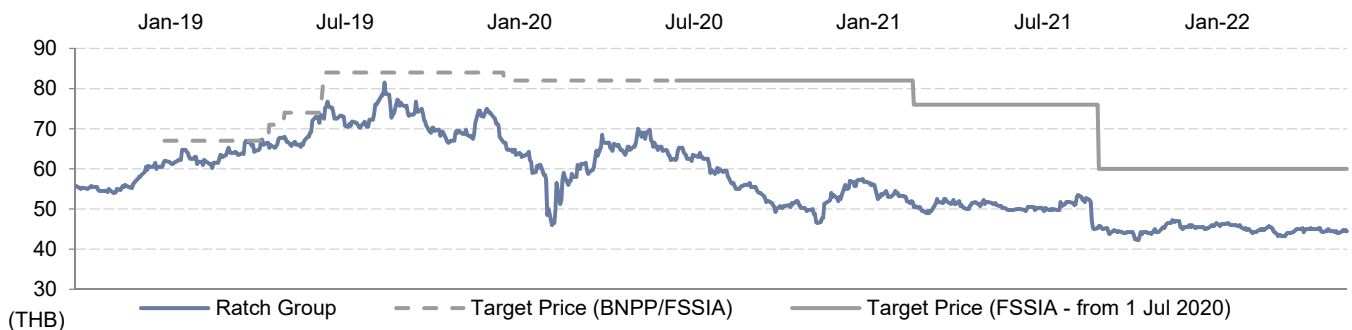
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
16-Dec-2020	HOLD	200.00	01-Oct-2021	BUY	220.00	-	-	-
09-Feb-2021	BUY	200.00	05-Jan-2022	BUY	260.00	-	-	-

Naruedom Mujjalinkool started covering this stock from 16-Dec-2020

Price and TP are in local currency

Source: FSSIA estimates

Ratch Group (RATCH TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
18-Apr-2019	BUY	67.00	02-Sep-2019	BUY	84.00	28-Jun-2021	BUY	60.00
17-Jul-2019	HOLD	71.00	04-Feb-2020	BUY	82.00			
30-Jul-2019	HOLD	74.00	20-Jan-2021	BUY	76.00			

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 26-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Gulf Energy Development	GULF TB	THB 49.00	BUY	The downside risks to our SoTP-based TP on GULF include 1) lower-than-expected demand for electricity in Thailand; 2) a lower crude price; and 3) delays in project commercial operation dates.
Intouch Holdings	INTUCH TB	THB 76.25	HOLD	The key downside risks to our NAV-discounted TP are if the sluggish performance from the satellite business continues and if there is a slower-than-expected 5G adoption rate. The key upside risk is if INTUCH synergizes with GULF faster than expected.
Advanced Info Service	ADVANC TB	THB 222.00	BUY	The key downside risks to our DCF-based TP are stronger-than-expected competition in the mobile market and the slower-than-expected adoption of 5G use cases.
Ratch Group	RATCH TB	THB 44.50	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.

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 Finasia 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 Finasia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 28-Jan-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

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

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

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

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

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

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

Industry Recommendations

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

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

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

Country (Strategy) Recommendations

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

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

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