

25 JULY 2025

EQUITY RESEARCH - COMPANY REPORT

WHA UTILITIES AND POWER

THAILAND / UTILITIES

WHAUP TB

FINANSIA

FSS INTERNATIONAL INVESTMENT ADVISORY

FSSIA ESG rating



BUY

UNCHANGED

TARGET PRICE	THB4.50
CLOSE	THB3.34
UP/DOWNSIDE	+34.7%
PRIOR TP	THB4.50
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	-5.0%

2Q25E soften on IU slowdown, FX loss

- Expect 2Q25 net profit to be flat q-q but decline 32% y-y, due to FX losses from USD assets following THB strength, a decline in utility revenues from weaker IU demand in the petrochemical sector, and higher SG&A expenses.
- Our full-year forecast may face downside risks, as 1H25E net profit accounts for only 37% of our current estimate.
- Retain BUY call at our TP of THB4.50, supported by a high potential upside from the promising AI data center investment in WHA's industrial estates.

Expect 2Q25 net profit to be flat q-q but drop y-y

We expect WHAUP to report a 2Q25 net profit of THB225m (flat q-q, -32.4% y-y). The expected q-q performance reflects lower utility revenue, as some IU petrochemical customers in WHA's industrial estates continued to operate at low production levels, despite potentially higher excessive charge revenues from the data center sector. However, profit sharing may be higher from the Dong Nai River project in Vietnam, supported by water volume growth from service area expansion. Meanwhile, IPPs profits from associates may decline due to GHECO-1, which may report a loss due to the full-quarter impact of higher coal costs. SPP margins would ease due to slightly lower gas costs and tariffs. Additionally, we project a THB56m FX loss from the net USD assets extended to associates due to THB appreciation (vs an FX gain in 1Q25 and 2Q24).

Expect more utility demand from the data center project

We view the impact of US reciprocal tariffs on Thailand's and Vietnam's industrial estates as limited in the short term. While export-oriented tenants, particularly in sectors such as petrochemicals and electronics, may experience softer orders, overall production activities may see support from diversified export markets and resilient domestic demand. Specifically, WHAUP stands to benefit from existing contracts, ongoing projects, and a strong investment pipeline. Moreover, the rapid expansion of AI data center investments—highlighted by the BOI's approval of THB240b in new projects last year—presents a significant growth opportunity for the power and utilities sector.

A downward adjustment to the forecast is likely

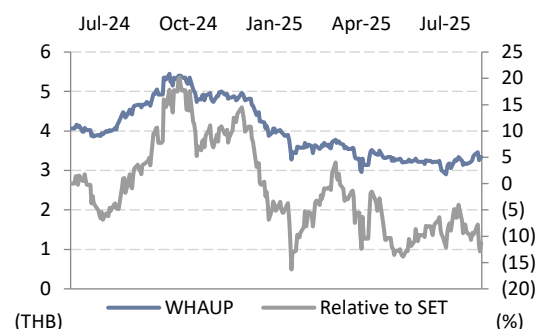
We maintain our 2025 core profit forecast of THB1.2b, up 21% y-y, underpinned by the low base in 2024 and margin improvement from lower coal costs at IPP plants (GHECO-1). Additional upside may come from 100MW of new capacity of the Saha Farm group in 2H25, potentially raising equity capacity to 980MW by the end of June 2025. Should 2Q25 earnings meet our expectations, 1H25 net profit would represent only 37% of our full-year forecast, implying potential downside risk to our projection.

Maintain BUY rating with our target price of THB4.50

We maintain our BUY rating on WHAUP, supported by its moderate growth outlook driven by the continued expansion of WHA Group's industrial estate business and accelerating data center investments in Thailand, which have not yet been factored into our current estimates.

KEY STOCK DATA

YE Dec (THB m)	2024	2025E	2026E	2027E
Revenue	2,926	3,297	3,424	3,598
Net profit	1,119	1,209	1,284	1,490
EPS (THB)	0.29	0.32	0.34	0.39
vs Consensus (%)	-	(10.4)	(9.8)	(2.5)
EBITDA	1,096	1,558	1,634	1,751
Recurring net profit	998	1,209	1,284	1,490
Core EPS (THB)	0.26	0.32	0.34	0.39
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	(30.9)	21.2	6.2	16.0
Core P/E (x)	12.8	10.6	9.9	8.6
Dividend yield (%)	7.5	7.5	9.0	9.0
EV/EBITDA (x)	24.9	17.0	16.5	15.6
Price/book (x)	0.9	0.9	0.9	0.9
Net debt/Equity (%)	106.7	99.3	100.0	100.3
ROE (%)	7.4	8.8	9.1	10.3



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	7.7	(1.8)	(18.9)
Relative to country (%)	(1.6)	(6.1)	(13.6)
Mkt cap (USD m)	396		
3m avg. daily turnover (USD m)	0.2		
Free float (%)	28		
Major shareholder	WHA Industrial Development Plc (69%)		
12m high/low (THB)	5.50/2.76		
Issued shares (m)	3,825.00		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

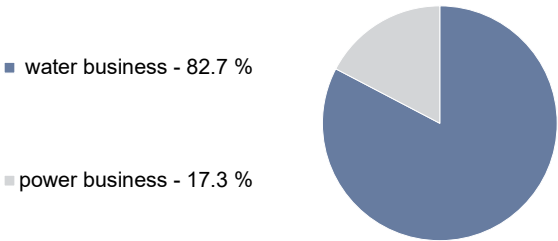
WHAUP is Thailand's largest utility company, offering comprehensive services to businesses in industrial estates. Also, it has the right to provide utility services to companies in WHA's industrial parks. WHAUP has continued expansion plans to increase its capacity for industrial water, electricity, and water treatment, corresponding with the growth of business operators in WHA's industrial estates in Thailand and Vietnam. It had an industrial water capacity of 166m CBM in 2024 and an electricity-generating capacity of 965MW as of end-2024, with 264MW under construction. By type, 57% was conventional energy and 43% was renewable. WHAUP aims to sign 1,185MW more PPAs by the end of 2025 and targets 2025 water volume sales of 173m CBM, up 4% y-y due to an expansion of WHA's industrial estates and customer base.

Company profile

WHAUP is under the WHA Group. Established in 2008, it provides comprehensive utility services to WHA's customers in industrial parks, with continued expansion plans to increase industrial water capacity and provide water treatment services to tenants in industrial estates and external operators.

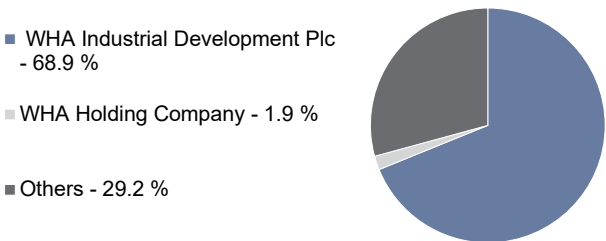
www.wha-up.com

Principal activities (revenue, 2024)



Source: WHA Utilities and Power

Major shareholders



Source: WHA Utilities and Power

Catalysts

- The expansion outlook of WHA's industrial estates from new customer bases, rising water and electricity demand from factories in industrial estates, potential contracts to sell water to new customers, and higher water charges.
- Insufficient water and electricity supply in Thailand and Vietnam, providing future growth opportunities for WHA's industrial estates.

Risks to our call

- Higher gas prices with lower electricity tariffs, pressured b government policies, resulting in significantly lower power margins
- Changes in state energy policies or regulatory risk.

Event calendar

Date	Event
8 Aug 2025	2Q25 earnings results announcement

Key assumptions

Key assumptions	2024	2025E	2026E
Electricity tariff	4.18	3.75	3.56
Electricity capacity - Equity PPA (MW)	1,000	1,200	1,500
Water sales & managed volume (MM3)	178	185	200
Equity income	845	764	846

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in gas price, we estimate 2025 earnings would rise by 1.1%, and vice versa, all else being equal.
- For every 1% increase in interest rate, we estimate 2025 earnings would decline by 1.3%, and vice versa, all else being equal.

Source: FSSIA estimates

Exhibit 1: WHAUP – 2Q25 earnings preview

Profit & Loss Statement	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25E	----- Change -----		2025E	Change	%6M25E
Year to Dec 31	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(y-y %)	of 2025E
Revenue	721	722	769	713	709	680	(4.1)	(5.8)	3,297	12.7	42%
Operating costs	(437)	(461)	(477)	(497)	(451)	(426)	(5.5)	(7.7)	(1,360)	(27.4)	64%
SG&A	(61)	(63)	(117)	(103)	(88)	(83)	(5.5)	31.8	(379)	(25.3)	45%
EBIT	222	198	175	113	171	172	0.5	(13.5)	1,041	46.8	33%
Interest expense	(126)	(130)	(142)	(138)	(138)	(136)	(1.7)	4.7	(551)	2.9	50%
FX gain/loss	82	22	(420)	313	(12)	(56)	na	na	0	na	na
Associates' contribution	159	212	500	73	194	220	13.4	3.8	764	(19.1)	54%
Pre-tax profit	487	333	85	231	231	230	(0.7)	(31.1)	1,264	11.3	36%
Tax	(17)	(1)	(4)	5	(7)	(5)	na	na	(55)	230.1	22%
Net profit	470	332	81	236	224	225	0.3	(32.4)	1,209	8.1	37%
Key Ratios (%)	(%)	(%)	(%)	(%)	(%)	(%)	(ppt)	(ppt)	(%)	(ppt)	
EBIT margin (%)	30.80	27.46	22.79	15.90	24.09	25.24	8.19	(6.71)	31.58	7.34	
Net profit margin (%)	65.18	46.02	10.51	33.06	31.59	33.03	(1.47)	(33.59)	36.67	(1.57)	
Tax rate (%)	3.51	0.29	4.31	(2.19)	3.11	2.18	5.31	(0.40)	0.00	(1.47)	

Sources: WHAUP; FSSIA estimates

Exhibit 2: Key valuations as of 24 July 2025

Company	BBG	Rec	Share	Target	Market	----- PE -----		----- ROE -----		----- PBV -----		- EV/ EBITDA -		--- DivYld ---	
			Price	price	Cap	25E	26E	25E	26E	25E	26E	25E	26E	25E	26E
			(LCY)	(LCY)	(USD m)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)
Thailand															
Global Power Synergy*	GPSC TB	BUY	32.75	36.0	2,860	19.5	17.3	4.4	4.8	0.8	0.8	12.5	12.8	2.7	2.7
Ratch Group*	RATCH TB	BUY	25.75	34.8	1,734	8.1	8.3	7.0	6.6	0.6	0.5	17.1	18.9	6.6	6.6
CK Power*	CKP TB	BUY	2.68	3.4	675	14.5	14.1	5.3	5.3	0.8	0.7	12.0	11.9	3.4	3.4
WHA Utilities and Power*	WHAUP TB	BUY	3.34	4.5	396	10.6	9.9	8.8	9.1	0.9	0.9	17.0	16.5	7.5	9.0
Gulf Development*	GULF TB	BUY	46.25	57.7	21,398	27.0	23.2	7.4	8.1	1.9	1.8	32.6	30.5	1.9	2.2
Electricity Generating*	EGCO TB	BUY	112.00	116	1,826	7.0	7.3	7.8	7.1	0.5	0.5	14.2	12.5	5.8	5.8
BCPG	BCPG TB	n/a	6.60	n/a	616	13.7	10.1	4.7	6.0	0.6	0.6	15.3	12.0	4.0	4.3
Energy Absolute	EA TB	n/a	2.86	n/a	657	n/a	n/a	6.9	4.3	0.5	0.5	10.8	12.7	n/a	n/a
B Grimm Power	BGRIM TB	n/a	11.10	n/a	895	16.3	13.8	4.8	5.4	0.7	0.7	11.0	10.9	3.2	3.6
Banpu Power	BPP TB	n/a	7.05	n/a	669	6.0	5.5	6.9	7.0	0.4	0.4	8.4	8.3	8.5	8.7
Gunkul Engineering	GUNKUL TB	n/a	1.62	n/a	431	8.7	7.8	11.4	12.0	1.0	0.9	8.0	8.1	6.0	6.4
Absolute Clean Energy	ACE TB	n/a	1.30	n/a	400	13.1	7.3	6.2	10.2	0.8	0.7	8.4	5.4	n/a	n/a
Thailand avg					32,556	13.1	11.3	6.8	7.2	0.8	0.8	14.0	13.4	5.0	5.3

Sources: Bloomberg; *FSSIA estimates

Valuation

Exhibit 3: Sum-of-the-parts target price

Cost of equity assumptions		(%)	Cost of debt assumptions		(%)
Risk free rate		3.0	Pre-tax cost of debt		5.0
Market risk premium		11.0	Marginal tax rate		20.0
Stock beta		1.1			
Cost of equity, Ke		12.9	Net cost of debt, Kd		3.8
Weight applied		30.0	Weight applied		70.0
WACC (%)		7.2			

DCF valuation estimate	MW	(%)	Equity Capacity	Type	(THB m)	(THB/share)	Comments
Gheco-1 (Aug,2012) - Coal	660	35%	231	IPP	3,159	0.8	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GLOW IPP (Jan,03)-Gas	713	5%	36	IPP	153	0.0	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
Houay Ho (Sep,99)-Hydro	152	13%	19	IPP	389	0.1	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GJP NLL (May, 2013) - Gas	123	25%	31	SPP	1,145	0.3	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF SOLAR (2014) - solar	1	25%	0	VSPP	4	0.0	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
WHA GUNKUL (2014) - solar	3	75%	2	VSPP	72	0.0	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
BGRIM POWER (Nov, 2016)	121	25%	30	Gas Co-gen	553	0.1	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF VTP (2017)	130	25%	33	Gas Co-gen	1,177	0.3	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF TS1 (2017)	130	25%	33	Gas Co-gen	2,687	0.7	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF TS2 (2017)	130	25%	33	Gas Co-gen	2,654	0.7	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF TS3 (2017)	125	25%	31	Gas Co-gen	2,346	0.6	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF TS4 (2018)	125	25%	31	Gas Co-gen	2,509	0.7	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
GULF NLL2 (2019)	120	25%	30	Gas Co-gen	1,650	0.4	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
Solar Rooftop Projects	142	100%	142	Solar Rooftop	4,066	1.1	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
Chonburi Xean Energy (Waste Heat,2019)	7	33%	2		555	0.1	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
Water in Thailand (cmpd)	394	100%	394		7,820	2.0	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
Duong River - Vietnam Utilities	300	34%	102		1,009	0.3	WACC 7.2%, Risk free rate 3%, Risk premium 9%, Zero terminal growth
Net debt					(14,714)	(3.8)	
Residual ordinary equity					17,234	4.5	

Sources: WHAUP, FSSIA estimates

Financial Statements

WHA Utilities and Power

Profit and Loss (THB m) Year Ending Dec	2023	2024	2025E	2026E	2027E
Revenue	2,782	2,926	3,297	3,424	3,598
Cost of goods sold	(1,965)	(1,993)	(1,877)	(1,984)	(2,093)
Gross profit	816	932	1,420	1,439	1,506
Other operating income	-	-	-	-	-
Operating costs	(277)	(344)	(379)	(394)	(414)
Operating EBITDA	975	1,096	1,558	1,634	1,751
Depreciation	(436)	(508)	(517)	(588)	(659)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	539	588	1,041	1,046	1,092
Net financing costs	(483)	(540)	(551)	(542)	(559)
Associates	1,380	944	764	827	1,006
Recurring non-operating income	1,418	966	774	837	1,017
Non-recurring items	188	121	0	0	0
Profit before tax	1,662	1,135	1,264	1,341	1,550
Tax	(31)	(17)	(55)	(57)	(60)
Profit after tax	1,631	1,119	1,209	1,284	1,490
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	1,631	1,119	1,209	1,284	1,490
Non-recurring items & goodwill (net)	(188)	(121)	0	0	0
Recurring net profit	1,443	998	1,209	1,284	1,490
Per share (THB)					
Recurring EPS *	0.38	0.26	0.32	0.34	0.39
Reported EPS	0.43	0.29	0.32	0.34	0.39
DPS	0.25	0.25	0.25	0.30	0.30
Diluted shares (used to calculate per share data)	3,825	3,825	3,825	3,825	3,825
Growth					
Revenue (%)	13.9	5.2	12.7	3.8	5.1
Operating EBITDA (%)	12.0	12.4	42.2	4.9	7.2
Operating EBIT (%)	7.1	9.0	77.0	0.5	4.4
Recurring EPS (%)	217.6	(30.9)	21.2	6.2	16.0
Reported EPS (%)	259.0	(31.4)	8.1	6.2	16.0
Operating performance					
Gross margin inc. depreciation (%)	29.3	31.9	43.1	42.0	41.8
Gross margin exc. depreciation (%)	45.0	49.2	58.8	59.2	60.2
Operating EBITDA margin (%)	35.1	37.4	47.3	47.7	48.7
Operating EBIT margin (%)	19.4	20.1	31.6	30.5	30.3
Net margin (%)	51.9	34.1	36.7	37.5	41.4
Effective tax rate (%)	11.1	8.7	11.0	11.0	11.0
Dividend payout on recurring profit (%)	66.3	95.8	79.1	89.3	77.0
Interest cover (X)	4.1	2.9	3.3	3.5	3.8
Inventory days	-	-	-	-	-
Debtor days	59.3	61.4	52.6	48.8	44.5
Creditor days	119.8	134.9	152.4	150.1	150.1
Operating ROIC (%)	6.7	6.9	11.3	10.2	9.9
ROIC (%)	6.4	5.1	5.7	5.8	6.3
ROE (%)	11.0	7.4	8.8	9.1	10.3
ROA (%)	6.5	5.0	5.6	5.7	6.2
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
water business	2,358	2,419	2,719	2,764	2,937
power business	424	507	578	660	661
service income					

Sources: WHA Utilities and Power; FSSIA estimates

Financial Statements

WHA Utilities and Power

Cash Flow (THB m) Year Ending Dec	2023	2024	2025E	2026E	2027E
Recurring net profit	1,443	998	1,209	1,284	1,490
Depreciation	436	508	517	588	659
Associates & minorities	1,380	944	764	827	1,006
Other non-cash items	-	-	-	-	-
Change in working capital	(90)	2	(8)	26	24
Cash flow from operations	3,169	2,451	2,482	2,725	3,179
Capex - maintenance	(1,422)	(1,422)	(1,422)	(1,422)	(1,422)
Capex - new investment	(36)	(378)	(1,290)	0	0
Net acquisitions & disposals	640	(161)	0	0	0
Other investments (net)	-	-	-	-	-
Cash flow from investing	(818)	(1,960)	(2,712)	(1,422)	(1,422)
Dividends paid	(956)	(956)	(956)	(956)	(1,148)
Equity finance	0	0	0	0	0
Debt finance	1,159	1,407	(519)	(10)	990
Other financing cash flows	109	(1,064)	(1,263)	(1,360)	(1,385)
Cash flow from financing	312	(613)	(2,738)	(2,326)	(1,543)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	425	3,139	563	379
Net other adjustments	(2,089)	425	3,139	563	379
Movement in cash	574	303	171	(460)	593
Free cash flow to firm (FCFF)	2,816.09	1,027.13	321.99	1,845.18	2,316.01
Free cash flow to equity (FCFE)	1,529.89	1,258.94	1,127.52	496.55	1,740.72
Per share (THB)					
FCFF per share	0.74	0.27	0.08	0.48	0.61
FCFE per share	0.40	0.33	0.29	0.13	0.46
Recurring cash flow per share	0.85	0.64	0.65	0.71	0.82
Balance Sheet (THB m) Year Ending Dec	2023	2024	2025E	2026E	2027E
Tangible fixed assets (gross)	9,631	9,632	11,054	12,476	13,898
Less: Accumulated depreciation	(1,964)	(1,963)	(2,480)	(3,068)	(3,727)
Tangible fixed assets (net)	7,668	7,670	8,574	9,408	10,170
Intangible fixed assets (net)	4,642	4,603	4,603	4,603	4,603
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	14,961	14,800	14,800	14,800	14,800
Cash & equivalents	1,295	1,598	1,769	1,309	1,902
A/C receivable	500	484	467	448	429
Inventories	0	0	0	0	0
Other current assets	245	307	346	359	377
Current assets	2,040	2,389	2,582	2,116	2,709
Other assets	507	495	495	495	495
Total assets	29,817	29,957	31,053	31,422	32,777
Common equity	13,567	13,562	13,875	14,233	14,576
Minorities etc.	0	0	0	0	0
Total shareholders' equity	13,567	13,562	13,875	14,233	14,576
Long term debt	10,959	12,846	13,546	14,536	15,526
Other long-term liabilities	948	927	927	927	927
Long-term liabilities	11,908	13,773	14,473	15,463	16,453
A/C payable	529	569	567	582	597
Short term debt	3,699	3,219	2,000	1,000	1,000
Other current liabilities	114	123	139	144	152
Current liabilities	4,343	3,912	2,706	1,726	1,749
Total liabilities and shareholders' equity	29,817	31,247	31,053	31,422	32,778
Net working capital	101	99	107	81	57
Invested capital	27,878	27,666	28,579	29,387	30,126
* Includes convertibles and preferred stock which is being treated as debt					
Per share (THB)					
Book value per share	3.55	3.55	3.63	3.72	3.81
Tangible book value per share	2.33	2.34	2.42	2.52	2.61
Financial strength					
Net debt/equity (%)	98.5	106.7	99.3	100.0	100.3
Net debt/total assets (%)	44.8	48.3	44.4	45.3	44.6
Current ratio (x)	0.5	0.6	1.0	1.2	1.5
CF interest cover (x)	4.2	4.0	5.4	1.9	4.1
Valuation	2023	2024	2025E	2026E	2027E
Recurring P/E (x) *	8.9	12.8	10.6	9.9	8.6
Recurring P/E @ target price (x) *	11.9	17.3	14.2	13.4	11.6
Reported P/E (x)	7.8	11.4	10.6	9.9	8.6
Dividend yield (%)	7.5	7.5	7.5	9.0	9.0
Price/book (x)	0.9	0.9	0.9	0.9	0.9
Price/tangible book (x)	1.4	1.4	1.4	1.3	1.3
EV/EBITDA (x) **	26.8	24.9	17.0	16.5	15.6
EV/EBITDA @ target price (x) **	31.4	28.9	19.9	19.2	18.2
EV/invested capital (x)	0.9	1.0	0.9	0.9	0.9
* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income					

Sources: WHA Utilities and Power; FSSIA estimates

Wha Utilities and Power PCL (WHAUP TB)

FSSIA ESG rating



61.21 / 100

Exhibit 4: FSSIA ESG score implication

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

Sources: FSSIA estimates

Exhibit 5: ESG – peer comparison

	FSSIA ESG score	Domestic ratings						Global ratings						--- Bloomberg ---	
		DJSI	SET ESG	SET ESG Rating	CG score	AGM level	Thai CAC	Morningstar ESG risk	ESG Book	MSCI	Moody's	Refinitiv	S&P Global	ESG score	Disclosure score
SET100	67.71	5.69	4.38	4.05	4.77	4.43	4.02	Medium	57.34	BBB	22.70	60.82	67.31	1.19	35.34
Coverage	66.17	5.16	4.33	3.94	4.81	4.43	3.83	Medium	56.41	BBB	18.92	59.20	65.82	1.38	35.46
BGRIM	65.91	--	Y	AAA	5.00	5.00	Certified	High	62.27	BBB	--	54.54	84.00	--	73.28
CKP	59.10	--	Y	AAA	5.00	5.00	--	High	66.67	BBB	--	69.84	54.00	--	62.95
GPSC	71.89	Y	Y	AA	5.00	5.00	Certified	Medium	64.56	B	--	54.57	86.00	--	--
TTW	53.68	--	Y	AA	5.00	5.00	--	Medium	54.71	BB	--	36.69	49.00	2.74	64.60
WHAUP	61.21	--	Y	AAA	5.00	5.00	Certified	Medium	67.11	BB	--	64.23	--	--	63.71

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

Exhibit 6: ESG score by Bloomberg

FY ending Dec 31	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
ESG financial materiality scores - ESG score	—	—	2.35	2.78	—
BESG environmental pillar score	—	—	1.53	1.56	—
BESG social pillar score	—	—	1.55	2.86	—
BESG governance pillar score	—	—	4.70	5.26	—
ESG disclosure score	58.24	60.69	63.49	62.64	63.71
Environmental disclosure score	55.18	55.51	57.26	57.26	57.26
Social disclosure score	38.36	45.37	45.77	43.20	46.40
Governance disclosure score	81.10	81.10	87.36	87.36	87.36
Environmental					
Emissions reduction initiatives	Yes	Yes	Yes	Yes	Yes
Climate change policy	No	Yes	Yes	Yes	Yes
Climate change opportunities discussed	No	No	No	No	No
Risks of climate change discussed	No	No	Yes	Yes	Yes
GHG scope 1	0	1	0	0	0
GHG scope 2 location-based	16	14	13	12	13
GHG Scope 3	—	—	2,166	2,087	2,163
Carbon per unit of production	—	—	—	—	—
Biodiversity policy	Yes	Yes	Yes	Yes	Yes
Energy efficiency policy	Yes	Yes	Yes	Yes	Yes
Total energy consumption	28	28	31	34	31
Renewable energy use	0	0	0	2	2
Electricity used	27	27	30	33	30
Fuel used - natural gas	—	—	—	—	—

Sources: Bloomberg; FSSIA's compilation

Exhibit 7: ESG score by Bloomberg (cont.)

FY ending Dec 31	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Fuel used - crude oil/diesel	No	No	No	No	No
Waste reduction policy	Yes	Yes	Yes	Yes	Yes
Hazardous waste	0	0	0	0	0
Total waste	4	8	8	7	8
Waste recycled	—	—	4	4	7
Waste sent to landfills	4	5	2	1	0
Environmental supply chain management	Yes	Yes	Yes	Yes	Yes
Water policy	Yes	Yes	Yes	Yes	Yes
Water consumption	—	—	—	—	—
Social					
Human rights policy	Yes	Yes	Yes	Yes	Yes
Policy against child labor	No	Yes	Yes	Yes	Yes
Quality assurance and recall policy	Yes	Yes	Yes	Yes	Yes
Consumer data protection policy	No	Yes	Yes	Yes	Yes
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	Yes	Yes	Yes
Pct women in workforce	16	17	20	22	19
Pct disabled in workforce	0	0	0	0	0
Business ethics policy	Yes	Yes	Yes	Yes	Yes
Anti-bribery ethics policy	Yes	Yes	Yes	Yes	Yes
Health and safety policy	Yes	Yes	Yes	Yes	Yes
Lost time incident rate - employees	1	0	0	0	0
Total recordable incident rate - employees	—	0	1	0	0
Training policy	Yes	Yes	Yes	Yes	Yes
Fair remuneration policy	No	No	No	No	Yes
Number of employees – CSR	110	127	152	164	194
Employee turnover pct	11	9	7	—	—
Total hours spent by firm - employee training	1,755	2,463	3,871	3,941	5,376
Social supply chain management	Yes	Yes	Yes	Yes	Yes
Governance					
Board size	8	8	10	10	10
No. of independent directors (ID)	3	4	5	4	4
No. of women on board	2	2	2	2	2
No. of non-executive directors on board	4	4	6	9	9
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	11	8	7	10	8
Board meeting attendance pct	94	100	100	100	100
Board duration (years)	3	3	3	3	3
Director share ownership guidelines	No	No	No	No	No
Age of the youngest director	52	49	50	50	51
Age of the oldest director	67	68	69	70	71
No. of executives / company managers	9	8	8	9	8
No. of female executives	2	2	2	2	1
Executive share ownership guidelines	No	No	No	No	No
Size of audit committee	3	3	3	3	3
No. of ID on audit committee	3	3	3	3	3
Audit committee meetings	6	5	5	7	6
Audit meeting attendance %	94	100	100	100	100
Size of compensation committee	3	3	3	3	3
No. of ID on compensation committee	2	2	2	2	2
No. of compensation committee meetings	5	3	4	4	4
Compensation meeting attendance %	100	100	100	100	100
Size of nomination committee	3	3	3	3	3
No. of nomination committee meetings	5	3	4	4	4
Nomination meeting attendance %	100	100	100	100	100
Sustainability governance					
Verification type	No	No	Yes	Yes	Yes

Sources: Bloomberg; FSSIA's compilation

Disclaimer for ESG scoring

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

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

Source: FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Songklod Wongchai FSS International Investment Advisory Securities Co., Ltd

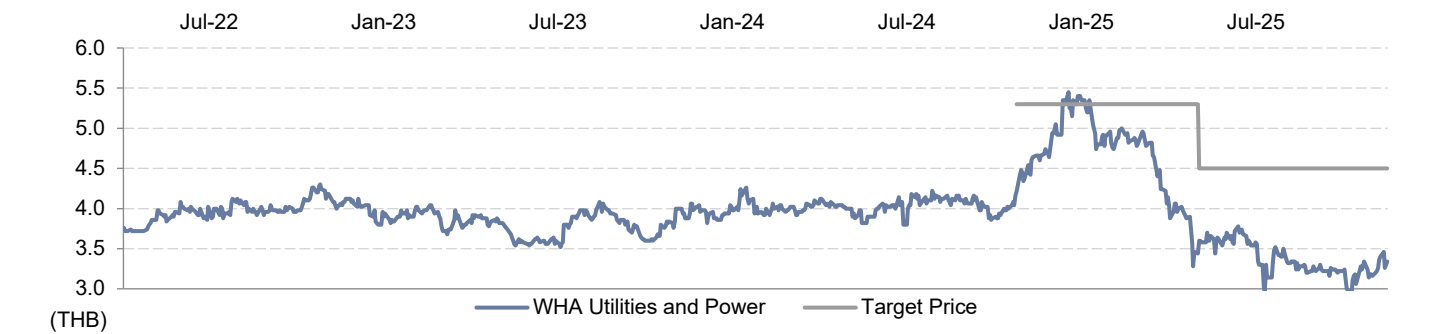
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

WHA Utilities and Power (WHAUP TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
05-Sep-2024	BUY	5.30	31-Oct-2024	HOLD	5.30	10-Feb-2025	BUY	4.50

Songklod Wongchai started covering this stock from 15-May-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
WHA Utilities and Power	WHAUP TB	THB 3.34	BUY	<ul style="list-style-type: none">Higher gas prices with lower electricity tariffs, pressured by government policies, resulting in significantly lower power marginsChanges in state energy policies or regulatory risk.

Source: FSSIA estimates

Additional Disclosures

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

All share prices are as at market close on 24-Jul-2025 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.