

Hong Kong

ADD (no change)

Consensus ratings*: Buy 4 Hold 1 Sell 0

Current price:	HK\$6.58
Target price:	HK\$14.00
Previous target:	HK\$18.50
Up/downside:	112.8%
CGS-CIMB / Consensus:	29.2%
Reuters:	0819.HK
Bloomberg:	819 HK
Market cap:	US\$945.1m
	HK\$7,410m
Average daily turnover:	US\$1.86m
	HK\$14.40m
Current shares o/s:	1,126m
Free float:	63.6%

*Source: Bloomberg

Key changes in this note

- FY22F/23F revenue decreased by 1.9%/1.4%
- FY22F/23F GPM decreased by 0.4%/0.3% pt
- FY22F/23F EPS decreased by 22.6%/20.3%



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	2.8	-23	-55.9
Relative (%)	5	-6.9	-27.8

Major shareholders	% held
Zhang Tianren	36.4

Analyst

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Tianneng Power International

Solid FY22F EPS growth with GPM recovery

- FY21 core net profit fell 43% yoy due to GPM declining 5% pts on surging lead and raw materials costs. It only formed 53% of our full-year forecast.
- We expect battery output to rise 10% yoy with c.3% GPM recovery in FY22F.
- We retain our Add call due to 21% EPS growth in FY22F and as the share price trades at an attractive c.4x FY22F P/E.

2H21 GPM fell 6% pts but heading towards a recovery

Tianneng Power's (Tianneng) 2H21 core net profit fell 55% yoy (+5% hoh) to Rmb724m, dragged down by 6.2% pts yoy decline (+0.3% pt hoh) in GPM on increase in lead and auxiliary material costs (mainly sulfuric acid). Manufacturing revenue, including lead-acid motive battery, recycled lead and lithium battery, rose 15% yoy to Rmb20bn in 2H21, driven by strong demand for lead-acid battery (+17% yoy) from e-bike/e-tricycle market and fast-growing special-purpose battery (+56% yoy). FY21 core net profit fell 43% yoy to Rmb1.41bn, due to a 16% rise in manufacturing revenue and 5% pts yoy decline in GPM. We cut our FY22F/23F EPS by c.23%/20% on lower GPM assumption and and battery manufacturing unit spin-off in A-share market.

Stable lead-acid battery demand growth in China's e-bike market

According to China Battery Industry Association, two-wheeled e-bike production was around 45m units and the ownership reached over 340m units in China in 2021. Tianneng maintained its leading market position with market share of over 45%, supported by over 3,000 distributors and over 400k points of sales across China. Tianneng continued to expand its market share in lead-acid battery with output increasing by c.9% to c.93GWh in FY21. We estimate lead-acid battery volume output to rise 10% yoy in FY22F on stable replacement demand from China's e-bike/e-tricycle market and stable market share expansion. More importantly, we believe that lead-acid battery GPM should recover to a healthier level of c.14% in FY22F (11.4% in FY21) due to stabilised material price, improving production efficiency as well as product mix approach.

Expanding capacity in lithium battery and battery recycling

Lithium battery revenue declined 7% yoy to Rmb987m due to drop in demand from co-sharing e-bike market on the back of the new policy introduction, while lithium storage products remained robust. Tianneng plans to add 10GWh lithium-ion capacity in the next three years from 3GWh in FY21 to 13GWh in order to capture the huge market opportunity for light motive vehicles, special electronic vehicle, electronic appliances and energy storage applications. The total investment will be c.Rmb4bn and the first phase production capacity of 4GWh will be completed in FY22F. On battery recycling business, revenue jumped 122% yoy to Rmb2.7bn in FY21, amid expanding capacity. Tianneng plans to increase lead recycling capacity from 700k ton to 1,000k ton and lithium-ion recycling capacity from 7k ton to 60k ton in FY22F to extend its self-sufficiency capability.

Retain Add with a lower target price of HK\$14.0

We keep our Add call due to solid EPS growth (+21% in FY22F) and cheap valuation of c.4x FY22F P/E. Our TP dips to HK\$14.0, now based on lower target multiple of 7x (previously 8x) FY23F P/E, +1 s.d. of its 5-year average, reflecting lower EPS growth rate. Re-rating catalysts: stable lead and raw material prices. Risks: keener competition.

Financial Summary

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Revenue (Rmbm)	53,525	85,615	88,296	91,519	94,767
Operating EBITDA (Rmbm)	2,952	1,668	2,621	2,209	2,874
Net Profit (Rmbm)	2,477	1,299	1,709	1,885	2,005
Normalised EPS (Rmb)	2.21	1.25	1.52	1.67	1.78
Normalised EPS Growth	47.9%	(43.2%)	21.0%	10.3%	6.3%
FD Normalised P/E (x)	2.49	4.38	3.62	3.28	3.09
DPS (Rmb)	0.33	0.33	0.33	0.39	0.41
Dividend Yield	6.11%	6.07%	6.08%	7.18%	7.63%
EV/EBITDA (x)	(0.00)	(0.90)	(0.41)	(1.13)	(1.42)
P/FCFE (x)	5.59	NA	27.69	2.89	2.63
Net Gearing	(71.5%)	(64.7%)	(61.5%)	(62.7%)	(64.1%)
P/BV (x)	0.69	0.47	0.46	0.40	0.35
ROE	32.3%	13.0%	13.1%	13.4%	12.5%
% Change In Normalised EPS Estimates			(22.6%)	(20.3%)	
Normalised EPS/consensus EPS (x)			0.78	0.73	0.63

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

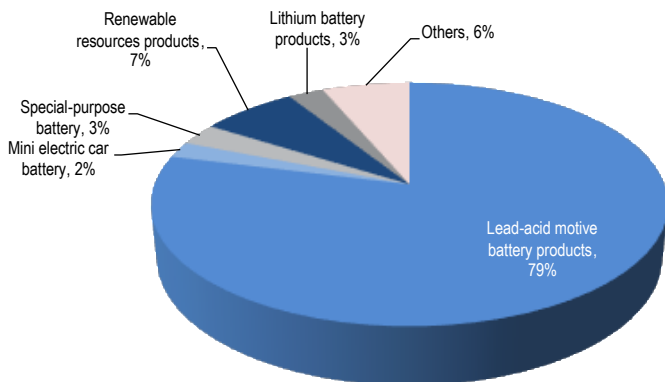
Solid FY22F EPS growth with GPM recovery

Figure 1: Results comparison

FYE 31 Dec (Rmb m)	2HFY21	2HFY20	yoy %	hoh %	2HFY21	2HFY20	yoy %	Prev.	
			chg	chg	Cum	Cum	chg	FY21F	Comments
Revenue	49,339	30,126	63.8	36.0	85,615	53,525	60.0	57,765	2H21 manufacturing revenue grew 15% yoy to Rmb20bn,
Operating costs	(47,917)	(27,965)	71.3	37.3	(82,806)	(49,868)	66.0	(53,808)	driven by lead-acid battery (+13% yoy), recycled lead (+77% yoy)
EBITDA	1,422	2,161	(34.2)	2.5	2,809	3,657	(23.2)	3,957	and lithium battery (-14% yoy).
EBITDA margin (%)	2.9	7.2			3.3	6.8		6.8	2H21 manufacturing GPM decreased 6.2% pts yoy to 12.15% due
Depn & amort.	(319)	(236)	35.1	12.8	(603)	(485)	24.3	(561)	to increase of auxiliary materials costs.
EBIT	1,102	1,924	(42.7)	(0.2)	2,206	3,172	(30.4)	3,396	
Interest expense	(136)	(106)	28.9	15.9	(254)	(212)	19.8	(182)	In line
Interest & invt inc	-	-	N/M	N/M	-	-	N/M	-	
Associates' contrib	(2)	(0)	N/M	N/M	(3)	(1)	N/M	-	
Exceptionals	(86)	47	N/M	212.5	(113)	(9)	-	-	
Pretax profit	878	1,865	(52.9)	(8.4)	1,836	2,950	(37.8)	3,214	
Tax	(71)	(194)	(63.5)	(67.1)	(286)	(445)	(35.8)	(498)	
Tax rate (%)	8.1	10.4	-	-	15.6	15.1		15.5	
Minority interests	(169)	(4)	3,851.3	104.7	(251)	(28)	808.6	(30)	
Net profit	638	1,667	(61.7)	(3.4)	1,299	2,477	(47.6)	2,686	2H21 net profit fell 62% yoy due to GPM contraction in battery manufacturing.
Core net profit	724	1,620	(55.3)	5.2	1,413	2,486	(43.2)	2,686	FY21 core net profit fell 43% yoy and only formed 53% of our forecasts.
EPS (Rmb cts)	56.7	148.0	(61.7)	(3.4)	115.4	219.9	(47.5)	238.5	The discrepancy came from increase of auxiliary material price which
Core EPS (Rmb cts)	64.3	143.8	(55.3)	5.2	125.4	220.7	(43.2)	238.5	dragged down battery manufacturing GPM.

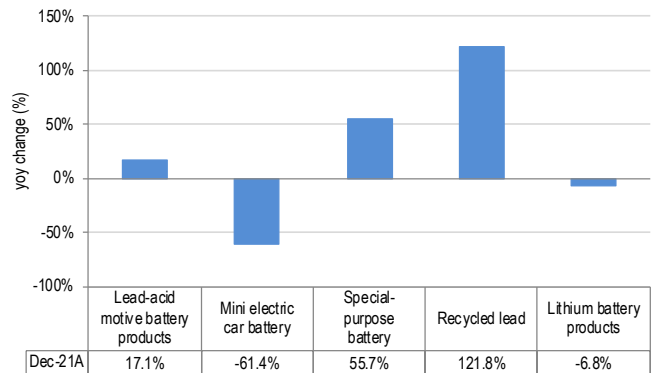
SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 2: Manufacturing revenue breakdown, by products (FY21)



SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 3: Manufacturing revenue growth rate, by products (FY21)



SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 4: Earnings revisions

FYE 31 Dec (Rmb m)	Dec-21A	Dec-22F			Dec-23F			Dec-24F		
		Old	New	% chg	Old	New	% chg	Old	New	% chg
Revenue	85,615	90,009	88,296	-1.9%	92,856	91,519	-1.4%	n.a.	94,767	n.a.
- manufacturing revenue	35,486	39,376	37,923	-3.7%	42,314	40,879	-3.4%	n.a.	43,832	n.a.
Gross profit	4,620	6,090	5,585	-8.3%	6,338	6,011	-5.2%	n.a.	6,454	n.a.
- manufacturing gross profit	4,568	6,045	5,533	-8.5%	6,388	5,959	-6.7%	n.a.	6,401	n.a.
Gross profit margin	5.4%	6.8%	6.3%	-0.4% pts	6.8%	6.6%	-0.3% pts	n.a.	6.8%	n.a.
- manufacturing gross profit margin	12.9%	15.4%	14.6%	-0.8% pts	15.1%	14.6%	-0.5% pts	n.a.	14.6%	n.a.
Net profit	1,299	2,208	1,709	-22.6%	2,364	1,883	-20.3%	n.a.	2,001	n.a.
EPS (Rmb)	1.15	1.96	1.52	-22.6%	2.10	1.67	-20.3%	n.a.	1.78	n.a.

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

Figure 5: Peers comparison

Company	Bloomberg		Price Target price		Upside (%)	Market Cap (US\$m)	P/E(x)		3-year EPS CAGR %	P/BV (x)		ROE (%)		EV/EBITDA (x)		Yield (%)	
	Code	Recom.	(local curr)	(local curr)			CY2022F	CY2023F		CY2022F	CY2023F	CY2022F	CY2023F	CY2022F	CY2023F	CY2022F	CY2023F
Tianneng Power	819 HK	Add	6.58	14.00	113%	945	3.2	3.0	13.2%	0.5	0.4	13.1%	13.4%	(0.4)	(1.1)	6.1%	7.2%
Lead-acid battery and batteries manufacturers																	
Camel Group	601311 CH	Not Rated	9.83	N/A	n.a.	1,797	9.3	8.3	25.1%	1.2	N/A	14.1%	13.2%	N/A	N/A	3.7%	0.0%
Johnson Controls, Inc	JCI US	Not Rated	63.53	N/A	n.a.	44,638	19.4	16.2	17.9%	2.4	2.2	12.5%	14.5%	13.1	11.5	2.0%	2.2%
Average							14.3	12.3	21.5%	1.8	2.2	13.3%	13.8%	13.1	11.5	2.8%	1.1%
Battery materials suppliers																	
Do-Fluoride Chemicals	002407 CH	Not Rated	34.85	N/A	n.a.	4,161	13.4	12.6	N/A	4.3	3.3	28.9%	26.4%	7.8	9.5	0.7%	0.5%
Shenzhen Kedali Industry	002850 CH	Not Rated	121.78	N/A	n.a.	4,421	25.7	15.9	108.3%	5.1	4.0	20.3%	25.4%	N/A	N/A	0.8%	1.2%
Sichuan Tianqi Lithium	002466 CH	Not Rated	71.07	N/A	n.a.	16,363	15.0	13.2	N/A	6.3	4.4	54.7%	38.2%	7.7	6.9	1.2%	1.2%
Average							18.0	13.9	108.3%	5.2	3.9	34.6%	30.0%	7.7	8.2	0.9%	1.0%

SOURCES: CGS-CIMB RESEARCH, BLOOMBERG (PRICE AS AT 20 APR 2022)

ESG in a nutshell



Refinitiv ESG Scores

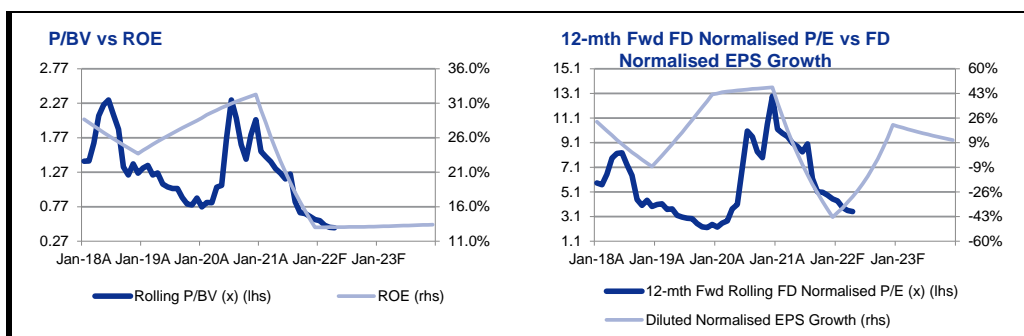


In 2021, Tianneng has continued its keen effort in ESG. With ongoing research and development on high-end environmentally friendly batteries and new energy batteries, immediate charging support for stranded passengers, and well-established governance and internal control system, Tianneng received praise and recognition from the public. Also, according to Refinitiv Eikon's rating, Tianneng achieved A+ (the highest rating) in controversies score, implying zero exposure to ESG controversies and negative events reflected in global media.

In our view, Tianneng is not involved in any environmentally-detrimental industry practices and takes the effort to minimise the environmental impact of its operations.

<p>Environmental</p> <p>Tianneng's products can effectively reduce carbon dioxide emissions.</p>	<p>Implications</p> <p>Tianneng's batteries can reduce carbon dioxide emissions by 3.264m tons, assuming 20% of batteries sold are used for motorcycles.</p> <p>It can also reduce carbon dioxide emissions by 0.408m tons, assuming 80% of batteries sold are used for cars.</p> <p>In terms of third-party rating, according to Refinitiv Eikon, within Tianneng's environmental pillar, two metrics, Renewable Energy Products and Environmental restoration initiatives scored a rating of 93.41 and 83.26 out of 100 respectively.</p>
<p>Social</p> <p>Tianneng provided free charging services for stranded passengers due to extreme heavy rainfall, which received praise from the public.</p>	<p>Implications</p> <p>Many places in Henan Province suffered from extreme heavy rainfall and trains were suspended. This caused nearly 3,000 passengers to be stranded in the station without power support. Tianneng understood the fact and delivered mobile energy storage batteries to those passengers overnight in the rain.</p> <p>In terms of third-party rating, according to Refinitiv Eikon, Tianneng's social pillar ranked 17 of 34 in the China automobiles & auto parts sector. We expect its score and ranking to improve after its keen effort in helping the community during a tough time.</p>
<p>Governance</p> <p>Tianneng established a three-level inspection mechanism to ensure a standardised environmental protection and security system.</p>	<p>Implications</p> <p>The mechanism included: Second-level company self-inspection and self-correction + business department supervision and inspection + group supervision and control. The aim of the above setting is to strengthen the safety bottom line on environmental protection and optimise internal resource uses.</p> <p>In terms of third-party rating, according to Refinitiv Eikon, Tianneng's governance pillar scored B+, and ranked 45 of 217 in the global automobiles & auto parts sector.</p>

SOURCES: CGS-CIMB RESEARCH, REFINITIV

BY THE NUMBERS

Profit & Loss

(Rmbm)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Total Net Revenues	53,525	85,615	88,296	91,519	94,767
Gross Profit	5,492	4,620	5,585	6,011	6,454
Operating EBITDA	2,952	1,668	2,621	2,209	2,874
Depreciation And Amortisation	(485)	(603)	(796)	(209)	(729)
Operating EBIT	2,467	1,066	1,825	2,000	2,145
Financial Income/(Expense)	(74)	(36)	77	65	98
Pretax Income/(Loss) from Assoc.	(1)	(3)	0	0	0
Non-Operating Income/(Expense)	567	923	650	750	750
Profit Before Tax (pre-EI)	2,959	1,950	2,551	2,814	2,993
Exceptional Items	(9)	(113)	0	0	0
Pre-tax Profit	2,950	1,836	2,551	2,814	2,993
Taxation	(445)	(286)	(395)	(436)	(464)
Exceptional Income - post-tax					
Profit After Tax	2,505	1,550	2,156	2,378	2,529
Minority Interests	(28)	(251)	(447)	(493)	(524)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Preference Dividends (Australia)					
Net Profit	2,477	1,299	1,709	1,885	2,005
Normalised Net Profit	2,514	1,664	2,156	2,378	2,529
Fully Diluted Normalised Profit	2,486	1,413	1,709	1,885	2,005

Cash Flow

(Rmbm)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
EBITDA	2,952	1,668	2,621	2,209	2,874
Cash Flow from Inv. & Assoc.	1	3	0	0	0
Change In Working Capital	(950)	405	(10)	28	27
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	579	859	864	1,697	1,237
Net Interest (Paid)/Received	(74)	(72)	77	65	98
Tax Paid	(267)	(573)	(395)	(436)	(464)
Cashflow From Operations	2,240	2,290	3,156	3,562	3,773
Capex	(1,148)	(1,464)	(3,000)	(1,500)	(1,500)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(89)	(3,596)	0	0	0
Cash Flow From Investing	(1,237)	(5,061)	(3,000)	(1,500)	(1,500)
Debt Raised/(repaid)	105	2,643	67	79	79
Proceeds From Issue Of Shares	0	0	0	0	0
Shares Repurchased	0	0	0	0	0
Dividends Paid	(404)	(375)	(367)	(434)	(461)
Preferred Dividends					
Other Financing Cashflow	(401)	4,744	(214)	(218)	(222)
Cash Flow From Financing	(701)	7,012	(515)	(572)	(604)
Total Cash Generated	302	4,241	(358)	1,490	1,669
Free Cashflow To Equity	1,108	(128)	223	2,142	2,352
Free Cashflow To Firm	1,215	(2,517)	371	2,280	2,495

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

BY THE NUMBERS... cont'd
Balance Sheet

(Rmbm)	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Total Cash And Equivalents	8,401	14,228	13,869	15,360	17,029
Total Debtors	2,349	3,329	3,433	3,558	3,685
Inventories	4,486	4,485	4,580	4,735	4,890
Total Other Current Assets	438	1,046	0	0	0
Total Current Assets	15,674	23,087	21,882	23,653	25,603
Fixed Assets	5,455	6,504	8,738	9,329	9,864
Total Investments	0	0	0	0	0
Intangible Assets	23	23	23	23	23
Total Other Non-Current Assets	2,048	3,124	2,432	2,532	2,623
Total Non-current Assets	7,526	9,652	11,194	11,885	12,510
Short-term Debt	919	2,875	2,920	2,973	3,026
Current Portion of Long-Term Debt					
Total Creditors	7,356	8,924	9,113	9,421	9,730
Other Current Liabilities	4,157	3,489	3,426	3,536	3,577
Total Current Liabilities	12,432	15,288	15,459	15,930	16,332
Total Long-term Debt	719	1,409	1,431	1,457	1,483
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	526	605	624	647	670
Total Non-current Liabilities	1,245	2,014	2,055	2,104	2,153
Total Provisions	64	60	73	81	86
Total Liabilities	13,741	17,362	17,587	18,114	18,571
Shareholders' Equity	8,746	12,980	13,093	15,027	17,146
Minority Interests	713	2,396	2,396	2,396	2,396
Total Equity	9,459	15,377	15,489	17,423	19,543

Key Ratios

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Revenue Growth	31.8%	60.0%	3.1%	3.7%	3.5%
Operating EBITDA Growth	22.5%	(43.5%)	57.1%	(15.7%)	30.1%
Operating EBITDA Margin	5.51%	1.95%	2.97%	2.41%	3.03%
Net Cash Per Share (Rmb)	6.01	8.83	8.45	9.71	11.12
BVPS (Rmb)	7.77	11.53	11.63	13.34	15.23
Gross Interest Cover	11.63	4.19	8.52	9.19	9.68
Effective Tax Rate	15.1%	15.6%	15.5%	15.5%	15.5%
Net Dividend Payout Ratio	14.8%	25.9%	21.5%	23.0%	23.0%
Accounts Receivables Days	13.21	12.10	13.98	13.94	13.99
Inventory Days	31.34	20.21	20.00	19.88	19.94
Accounts Payables Days	53.73	36.68	39.80	39.56	39.68
ROIC (%)	83.7%	24.3%	22.4%	22.5%	22.3%
ROCE (%)	25.5%	8.3%	10.7%	10.9%	10.7%
Return On Average Assets	12.1%	6.0%	6.4%	6.8%	6.7%

Key Drivers

	Dec-20A	Dec-21A	Dec-22F	Dec-23F	Dec-24F
Lead-acid motive battery revenue (yoy growth %)	-0.5%	17.1%	3.0%	5.0%	5.0%
Lithium battery revenue (yoy growth %)	69.0%	-6.8%	30.0%	20.0%	20.0%
Lead-acid motive battery (GPM %)	17.3%	11.4%	14.0%	14.0%	14.0%
Lithium battery (GPM %)	8.5%	2.0%	4.0%	6.0%	8.0%

SOURCES: CGS-CIMB RESEARCH, COMPANY REPORTS

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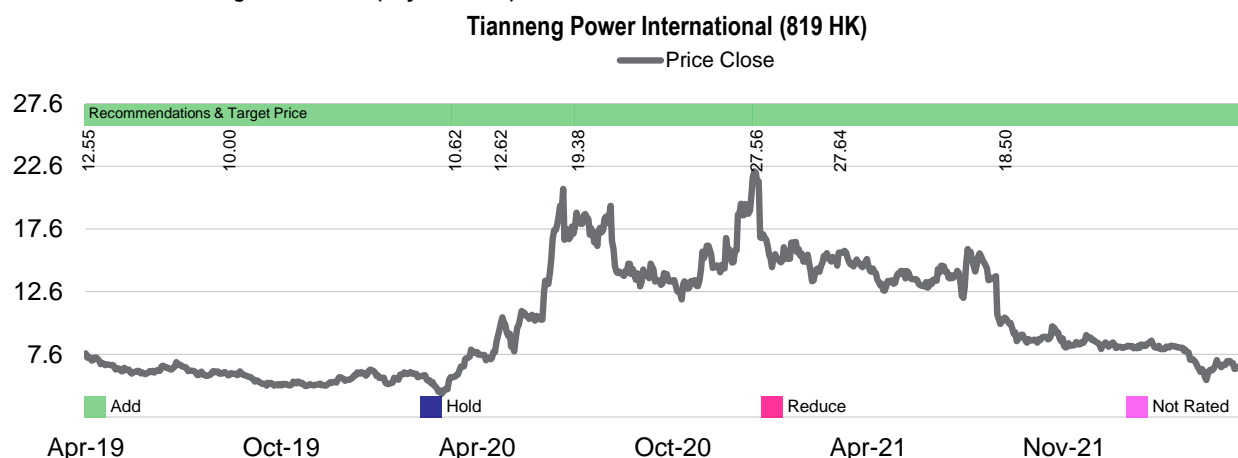
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Spitzer Chart for stock being researched (2 year data)

Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2021, Anti-Corruption 2021

ADVANC – Excellent, Certified, **AMATA** – Excellent, Certified, **ANAN** – Excellent, n/a, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Excellent, n/a, **AWC** – Excellent, Declared, **AU** – Good, n/a, **BAM** – Very Good, Certified, **BAY** – Excellent, Certified, **BBL** – Excellent, Certified, **BCH** – Very Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Excellent, n/a, **BEAUTY** – Good, n/a, **BEM** – Excellent, n/a, **BH** – Good, n/a, **BJC** – Very Good, n/a, **BLA** – Very Good, Certified, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – n/a, n/a, **CENTEL** – Excellent, Certified, **CHAYO** – Very Good, n/a, **CHG** – Very Good, n/a, **CK** – Excellent, n/a, **COM7** – Excellent, Certified, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **CPNREIT** – n/a, n/a, **CRC** – Excellent, Declared, **DELTA** – Excellent, Certified, **DDD** – Excellent, n/a, **DIF** – n/a, n/a, **DOHOME** – Very Good, Declared, **DREIT** – n/a, n/a, **DTAC** – Excellent, Certified, **ECL** – Excellent, Certified, **EGCO** – Excellent, Certified, **EPG** – Excellent, Certified, **ERW** – Very Good, Certified, **GFPT** – Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Excellent, n/a, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Certified, **III** – Excellent, Declared, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – n/a, n/a, **JKN** – n/a, Certified, **JMT** – Very Good, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KEX** – Very Good, Declared, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MAKRO** – Excellent, Certified, **MC** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MTC** – Excellent, Certified, **NETBAY** – Very Good, n/a, **NRF** – Very Good, Declared, **OR** – Excellent, n/a, **ORI** – Excellent, Certified, **OSP** – Excellent, n/a, **PLANB** – Excellent, Certified, **PRINC** – Very Good, Certified, **PR9** – Excellent, Declared, **PSH** – Excellent, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, n/a, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RAM** – n/a, n/a, **RBF** – Very Good, n/a, **RS** – Excellent, Declared, **RSP** – Good, n/a, **S** – Excellent, n/a, **SAK** – Very Good, Declared, **SAPPE** – Very Good, Certified, **SAWAD** – Very Good, n/a, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCGP** – Excellent, Declared, **SECURE** – n/a, n/a, **SHR** – Excellent, n/a, **SIRI** – Excellent, Certified, **SPA** – Very Good, n/a, **SPALI** – Excellent, Certified, **SPRC** – Excellent, Certified, **SSP** – Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIDLOR** – n/a, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, n/a, **TOP** – Excellent, Certified, **TRUE** – Excellent, Certified, **TTB** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Certified, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – n/a, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

- CG Score 2021 from Thai Institute of Directors Association (IOD)

- Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 5, 2021) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.

Recommendation Framework	
Stock Ratings	Definition:
Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.
<i>The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.</i>	
Sector Ratings	Definition:
Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.
Country Ratings	Definition:
Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.