

STARK CORPORATION

(STARK TB/ STARK.BK)

A new dawn

We initiate coverage of STARK with a BUY rating and Bt2.90/sh TP. Our recommendation is supported by (i) strong growth potential after the M&A deal, and (ii) a stable growth outlook in line with long-term GDP trend. We estimate FY20F earnings would grow 10-fold yoy to Bt1.4b and by 41% in FY21F to Bt2.0b, supported by (1) recognition of income from TPC and DVN, (ii) higher sales volume following aggressive customer acquisition strategy, and (iii) better cost efficiency.

Top 10 player (by revenue) in the global market

STARK is a holding company that invests in businesses that produce and distribute a range of electric wires and cables to the domestic and global market. Since STARK acquired PDITL in 2015, sales revenue has been rising by about 25% per year and its domestic market share had risen to 25% in 2018, and it is the largest supplier of High & Ultra-High voltage wires and cables in Thailand. STARK was ranked 13rd in the world in terms of revenue in 2018, and full-integration with TPC and DVN would move it up to 9th place.

Strong growth potential after M&A deal

The acquisition of TPC and DVN in March 2020 would benefit STARK in three ways: (i) improve production efficiency and lift production capacity by 249% to 192,000 tons/year, (ii) generate synergies through technology/knowledge transfer sharing of resources, and (iii) immediate opportunity to expand into Vietnam and other markets.

Earnings will continue to surge in FY20F and FY21F

We estimate FY20F profit would increase 10-fold yoy to Bt1.4b in the absence of business restructuring expenses (booked in 2019), coupled with 9 months contribution from TPC and DVN. Earnings would continue to grow by 41%yoy in FY21F to Bt2.0b, driven by (i) full-year contribution from TPC and DVN, (ii) higher sales volume following its aggressive customer acquisition strategy, and (iii) better cost efficiency.

Initiate coverage with BUY rating and Bt2.90 TP

Our TP is based on 35x FY21F core EPS. We applied a premium valuation to its peers in the same segment (CTW is trading at 26x PER) because the company is entering the rapid-growth cycle.

Financial Summary

Year to 31 Dec	Unit	2018	2019	2020F	2021F	2022F
Revenue	(Btm)	11,854	11,529	20,264	25,300	28,646
Revenue growth	(%)	2,600.10	(2.75)	75.77	24.85	13.23
EBITDA	(Btm)	1,232	928	2,280	2,966	3,332
EBITDA growth	(%)	(6,987.72)	(24.68)	145.67	30.12	12.31
Profit, core	(Btm)	290	(12.26)	1,404	1,976	2,291
Profit growth, core	(%)	(468.13)	(104.23)	n.a.	40.79	15.90
Profit, reported	(Btm)	362	124	1,404	1,976	2,291
Profit growth, reported	(%)	(559.70)	(65.77)	1,032.84	40.79	15.90
EPS, core	(Bt)	0.90	0.00	0.06	0.08	0.10
EPS growth, core	(%)	n.a.	n.a.	n.a.	40.79	15.90
DPS	(Bt)	0.00	0.00	0.00	0.00	0.00
P/E, core	(x)	2.56	n.a.	39.01	27.71	23.91
P/BV, core	(x)	0.75	22.26	14.92	9.70	6.90
ROE	(%)	20.48	6.00	46.56	42.00	33.49
Dividend yield	(%)	0.00	0.00	0.00	0.00	0.00
FCF yield	(%)	n.a.	n.a.	n.a.	n.a.	n.a.

BUY

Target price Bt2.90 (+26.1%) Price Bt2.30

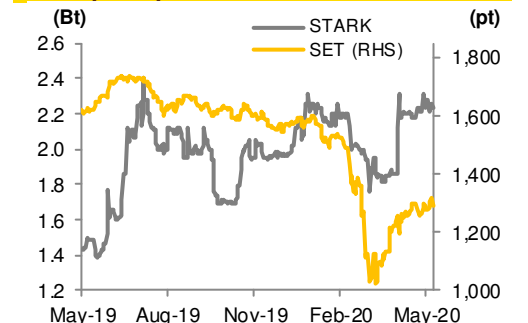


Adisak PROMBUN

Fundamental investment analyst on securities
+662 659 7000 ext 5013
Adisak.Prombun@krungsrisecurities.com

Key data	Unit	
12M high/ low	(Bt)	2.5/ 1.4
Market cap	(Btm/ USDm)	53,341/ 1,674
3M avg. daily turnover	(Btm/ USDm)	7.0/ 0.2
Free float	(%)	9.7
Issued shares	(m shares)	23,813
Major shareholders:		%
Vonnarat Tangkaravakoon		69.3
Stark Investment		21.0
Rewin Petaibunlue		4.92

Stock price performance



	Unit	ytd	1M	3M	12M
Total return	(%)	8.5	4.5	4.5	59.7
Total return vs SET	(%)	25.8	1.7	17.2	79.8

Krungsri vs Bloomberg consensus

	Unit	(+)	(=)	(-)
Bloomberg consensus	(Cnt.)	0	0	0
Target price	(Bt)	2.90	NA	NA
2020F net profit	(Btm)	1,404	N/A	NA
2021F net profit	(Btm)	1,976	N/A	NA

Earnings revision

Bloomberg	Unit	2020F	2021F
1M	(%)	NA	NA
3M	(%)	NA	NA
ytd	(%)	NA	NA
Krungsri			
From last report	(%)	NA	NA

Source: Bloomberg, Krungsri Securities

Business Overview

Stark Corporation Public Company Limited (STARK) is a holding company. Its core business is the production and distribution of a range of Wires & Cables under PDITL. It also has stakes in several other similar businesses, as well as in logistics services for the oil & gas industry. These are housed under 5 subsidiaries, as follows:

Figure 1: Company Structure



Source: Company Data, Krungsri Securities

Phelps Dodge International (Thailand) Limited (PDITL). PDITL was founded on June 4, 1968 and commenced first production at Samrong Plant. Today, PDITL is the manufacturer and distributor of a range of electric wires and cables to the world market through a network of production bases and offices in several regions, including Asia and Africa. Their products are considered crucial components in other industries, such as real estate, construction, petrochemicals, and telecommunications. PDITL is STARK's core subsidiary.

Adisorn Songkhla Co., Ltd. (ADS) was established, in 2010, in Songkhla province. It started by offering general construction services, and subsequently expanded to focus on offering Manpower and Property Rental services, especially to the oil & gas industry business. More specifically, it supplies skilled manpower to work on oil & gas platforms, which comprise those with specialized Engineering, Technical and Architecture knowledge. STARK acquired ADS in December 2019.

Thinh Phat Cables Joint Stock Company (TPC) is a business group that was established in Vietnam. THIPHA CABLES was established over 30 years ago to produce and distribute low- and medium-voltage electrical cables. It also produces aluminum in Vietnam (120,000 tons p.a.). Their products carry globally-recognized certifications from JIS, KEMA, IEC and ASTM. The company was acquired in March this year.

Dong Viet Non-Ferrous Metal and Plastic Joint Stock Company (DVN) is involved in the production and distribution of non-ferrous metal products, such as copper wire, copper core, aluminum core and plastic composite PVC and XLPE. It has 148,000 tons annual production capacity supported by modern technology and national production standards certified by TCVN and TUV. Its customers are involved in a variety of industries, including electrical wires and cables, magnetic wires, telecommunication and cables, and electrical equipment. The company was acquired in March this year.

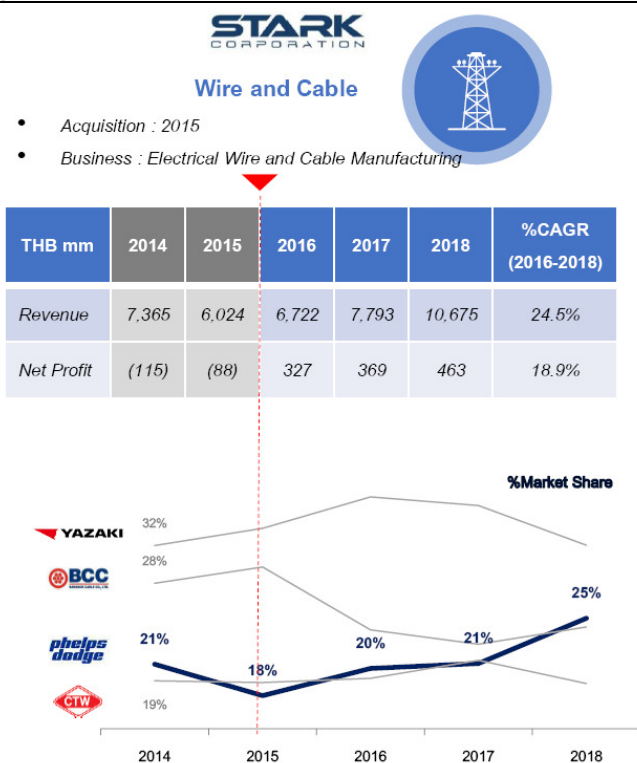
Thai Cable International Co., Ltd. (TCI) manufactures and distributes insulated copper and aluminum conductors under its own brands, *NATION* and *TCI*. Their products include building wires and cables, low/medium voltage power cables, control cables, automobile wires and cables, and bare conductors. Its products are distributed through major hardware stores, including *HomePro*, *HomeWork*, *Global House*, *Thai Watsadu*, and *SCG Home Mart*. The company was acquired in April this year.

Strong market positions in Thailand and worldwide

Since STARK acquired PDITL in 2015, sales revenue has been rising by 25% per annum, driven by a lean management structure to improve cost efficiency. That helped the company to grow its market share to 25% in 2018, the second largest in Thailand. However, PDITL holds top position in High & Ultra High voltage wire and cables in Thailand and ASEAN.

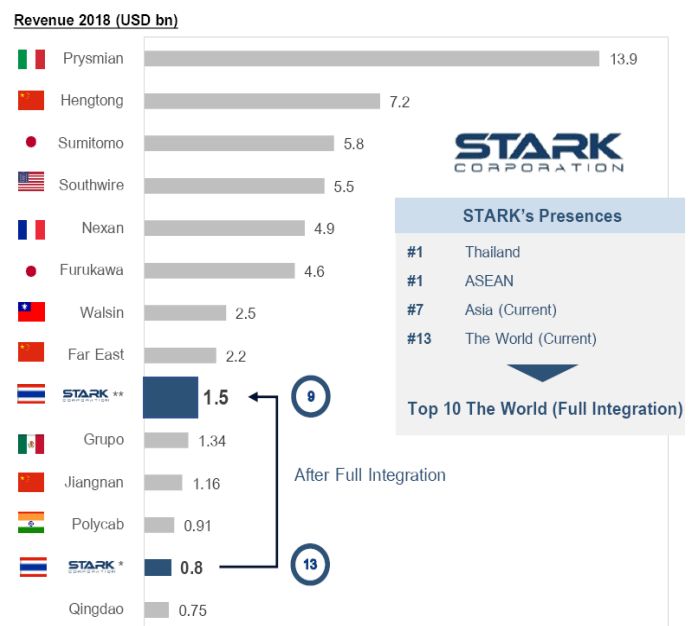
STARK was ranked 13rd in the world - by revenue - in 2018, and full-integration with TPC and DVN would move it up to 9th place.

Figure 2: Sales Revenue and Market Share



Source: Company Data, Krungsri Securities

Figure 3: World Ranking by Sales Revenue












Source: Company Data, Krungsri Securities

Advantage from specific products and certificates

PDITL is involved in the production and distribution of electrical wires and cables to domestic and international customers. It offers a range of electrical wires and cables, and is the only company in Thailand that produces ultra-high voltage electrical wires.

Its products are also certified or quality endorsed in Thailand, Vietnam, and internationally. That would help the company to access new markets.

Figure 4: Comparison of products among competitors

	Extra High Voltage (220 - 500 kV)	High Voltage (45 - 150 kV)	Medium Voltage (6 - 36 kV)	Low Voltage (<3 kV)	Extra Low Voltage (Instrument & Control wire)
   	✓	✓	✓	✓	✓
 BANGKOK CABLE CO., LTD.	✗	✓	✓	✓	✓
 	✗	✗	✓	✓	✓
 	✗	✗	✓	✓	✓
Other 50 Companies	✗	✗	✗	✓	✓

Source: Company Data, Krungsri Securities

Figure 5: Comparison of key certification among competitors

	Thailand	Vietnam	International
Key Certificates              			
   	●	●	●
  	●	○	●
 	○	●	●

Source: Company Data, Krungsri Securities

Acquisition of TPC and DVN would create synergies

The acquisition would benefit STARK in three ways:

1. **Improve production efficiency and lift production capacity:** TPC manufactures products that are similar to those produced by PDITL, which are low- and medium-voltage cables. In addition, there could be knowledge transfer to train TPC staff to produce high- and ultra-high voltage cables and other products. After the M&A, the group's electrical wires and cables production capacity would increase by 249% to 192,000 tons/year.

Figure 6: Capacity by business unit

	PDITL	TPC
Copper: Capacity (tons/year)	30,000	72,000
Copper: Utilization rate	80%	50%
Aluminum: Capacity (tons/year)	25,000	65,000
Aluminum: Utilization rate	70%	50%

Source: Company data, Krungsri Securities

2. **Generate synergies:** This would be driven by the two companies' similar businesses. For example, STARK can leverage on its expertise in the voltage line business at PDITL to enhance production efficiency at its new factory in Vietnam. The technology & knowledge transfer would help the group to produce better-quality or technologically-advanced products at the factory in Vietnam. In addition, STARK has several affiliated companies with large production capacities. The acquisition could allow STARK to expand its market easily. It would also give STARK better economies of scale, which would improve its bargaining power when negotiating payment terms and selling prices with suppliers. The larger business scale and its reputation would also be an advantage in negotiations with financial institutions.
3. **Immediate access to Vietnam and other markets:** Although STARK and the target companies have similar distribution channels, their markets do not overlap. Hence, this is an opportunity to expand its customer base to other countries where the target companies already have branches or partners, such as Vietnam, Cambodia, Myanmar, India, Philippines, Singapore and Australia. That would rapidly increase its market share at the global and regional levels.

Production Process

The production process takes between 30 and 90 days depending on the type and complexity of the electrical wires. The process can be split into 4 main procedures - casting, rolling, twisting and wrapping.

1. Casting

The main raw materials used for casting include copper cathode with 99.99% purity (LME Grade A), and aluminum ingot with 99.70% purity (EC Grade). The copper cathode and aluminum ingot will be melted in the furnace. The liquid metal is then immediately formed into lengths with square cross-section.

2. Rolling

The copper or aluminum conductive wires will be rolled into the desired diameter for each product. Then, they will be subject to quality tests, including conduction, shape (roundness), surface conditions, and diameter (depending on the type of wire).

3. Twisting

After the wire is rolled to the required diameter, they will be sent to the twisting machine. The number of strands would depend on the type of product. This improves flexibility and bending characteristics. The product is then subject to another set of quality tests.

4. Wrapping

The wire or cable is then wrapped with insulating material, normally PVC or XLPE. In this process, they would first melt the plastic pellets and mix in the desired color. The company uses a different color to identify each type of wire. The wire is sent to the wrapping head, where the machine will inject the melted plastic around the conductive wire. The insulation will be welded and is passed through water to solidify the plastic material.

Figure 7: Production Process

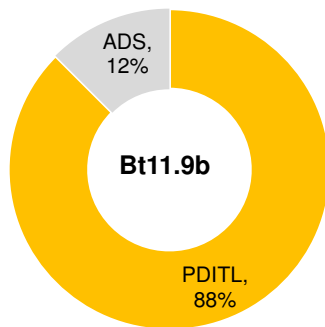


Source: Company Data, Krungsri Securities

Revenue structure

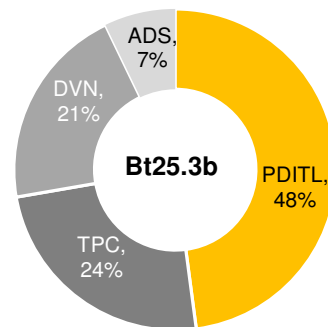
The group generates revenue from four business units: (1) PDITL, (2) TPC, (3) DVN, and (4) ADS. The following charts give a breakdown of group revenue for 2019 and 2021F, by business unit.

Figure 8: 2019 Revenue Breakdown by Business Unit



Source: Company Data, Krungsri Securities

Figure 9: 2021F Revenue Breakdown by Business Unit

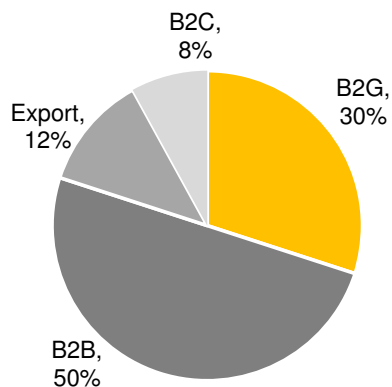


Source: Company Data, Krungsri Securities

At PDITL, the B2B (business-to-business) channel is the most important at 50% of sales revenue, followed by B2G (business-to-government) at 30%, exports 12%, and B2C (business-to-customers) 8%.

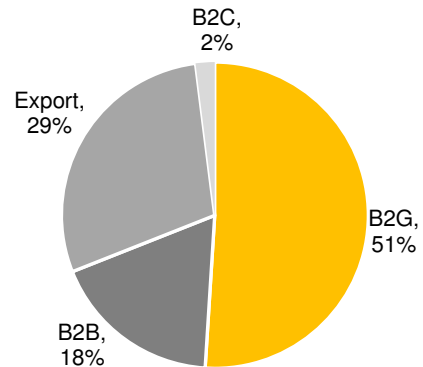
At TPC, the B2G channel is the most important at 51% of sales revenue, followed by B2B at 18%, exports 29%, and B2C 2%.

Figure 10: PDITL's Revenue Breakdown by Customer



Source: Company Data, Krungsri Securities

Figure 11: TPC's Revenue Breakdown by Customer



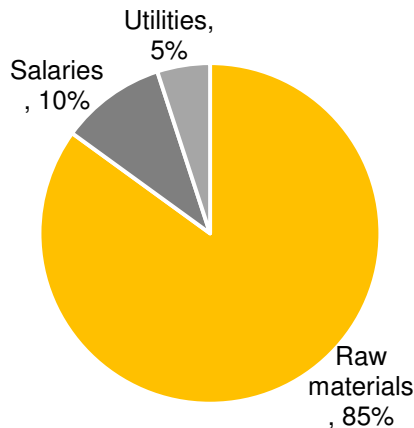
Source: Company Data, Krungsri Securities

Cost structure

At PDITL, 85% of production cost is for raw materials, mainly copper and aluminum. The rest is divided into 10% salaries & wages and 5% utilities & others. We assumed the cost structure would be similar for TPC and DVN.

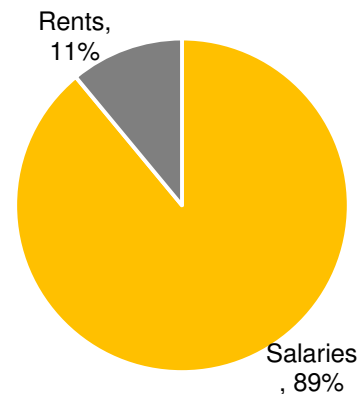
At ADS, COGS is divided into 89% salaries & wages and 11% rent & others.

Figure 12: COGS Breakdown at PDITL



Source: Company Data, Krungsri Securities

Figure 13: COGS Breakdown at ADS



Source: Company Data, Krungsri Securities

Industrial outlook

In 2017, the electric wire and cable market worldwide was valued as USD1.86b. Transparency Market Research and Grand View Research project the wire and cable markets would grow between 2018 and 2025 by an average of 4.1% and 6.4% per annum, respectively. This means global sales would reach USD2.36b and USD3.13b by 2025, respectively. This would be driven by a growing world population, urbanization, infrastructure development, rising demand for electricity by household and business sectors, and investment in smart grids.

Past data suggest the electric wire and cable market would grow in the same direction as GDP (Gross Domestic Product). The IMF (International Monetary Fund) projects global GDP would grow by -3.0% in 2020 and +5.8% in 2021. Southeast Asia (ASEAN-5) - Thailand, Malaysia, Indonesia, Philippines and Singapore – would register average GDP growth of -0.6% and 7.8% in those years. Hence, there is room to grow the market in Southeast Asia, driven by rising consumption by household and business sectors, and private and public sector investment.

Figure 14: Global economic growth projections

The COVID-19 pandemic will severely impact growth across all regions.

(real GDP, annual percent change)	PROJECTIONS		
	2019	2020	2021
World Output	2.9	-3.0	5.8
Advanced Economies	1.7	-6.1	4.5
United States	2.3	-5.9	4.7
Euro Area	1.2	-7.5	4.7
Germany	0.6	-7.0	5.2
France	1.3	-7.2	4.5
Italy	0.3	-9.1	4.8
Spain	2.0	-8.0	4.3
Japan	0.7	-5.2	3.0
United Kingdom	1.4	-6.5	4.0
Canada	1.6	-6.2	4.2
Other Advanced Economies	1.7	-4.6	4.5
Emerging Markets and Developing Economies	3.7	-1.0	6.6
Emerging and Developing Asia	5.5	1.0	8.5
China	6.1	1.2	9.2
India	4.2	1.9	7.4
ASEAN-5	4.8	-0.6	7.8

Source: IMF (World Economic Outlook, April 2020)

Thailand

Krungsri Research projects domestic electricity demand would grow by 3.5% per annum, or around 0.9-1.1 times GDP growth. However, domestic sales of electrical wires is expected to rise faster than power demand since the electricity demand outside the country is likely to increase as well. The IEA (International Energy Agency) projects electricity demand in Southeast Asia would grow by 3.7% per annum (during 2016 – 2040) or twice the global average, due to rapid urbanization, population growth, economic expansion, and rising electricity demand.

Vietnam

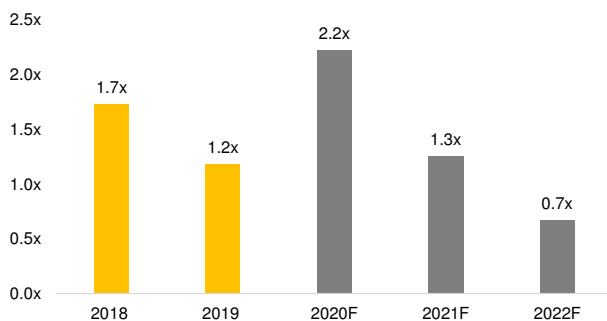
Electricity of Vietnam (EVN) projects electricity demand would increase by 10.3-11.3% per year, faster than the growth of power generation capacity which is 8.8% per year. The largest shortage is in southern Vietnam which consumes half the national power capacity. The current solution for this region is to buy electricity from northern and central Vietnam. The long-term solution would be to expand power generation capacity in southern Vietnam. Electricity demand is projected to reach 60,000 MW in 2020 and increase to 129,500 MW by 2030. To meet this demand, the Vietnamese government plans to develop electricity from renewable energy sources, including solar, wind and biomass. Vietnam may also import power from neighboring countries such as China and Laos.

Financial position will improve after consolidating revenues from new subsidiaries

After completing the M&A of TPC and DVN, we estimate net interest-bearing debt at Bt9.7b and cost of debt at 3.2%. It had Bt3.1b cash and EBITDA is around Bt3.0b a year, which is sufficient to service interest expense.

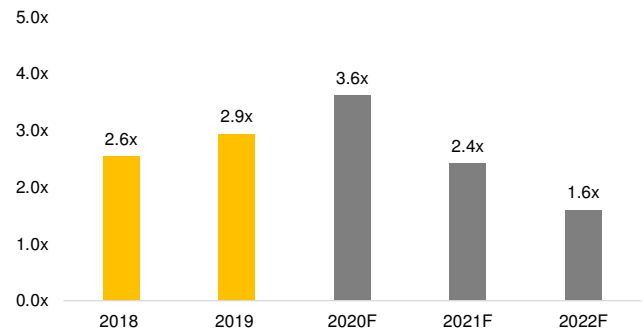
Given regular demand for electrical wires and cables and the positive synergies, STARK is expected to generate stable operating cash flow to repay debts. This will reduce its debt burden. Hence, we expected net D/E ratio and Net Debt-to-EBITDA to improve from 2.2x and 3.6x to 0.7x and 1.6x, respectively, within three years.

Figure 15: Net D/E ratio



Source: Company Data, Krungsri Securities

Figure 16: Net debt to EBITDA



Source: Company Data, Krungsri Securities

1Q20 net profit grew 109% yoy without M&A

STARK reported Bt261m net profit for the year, +109% yoy. This was driven by the following: (i) sales revenue grew 8% yoy supported by a larger market share in Thailand and overseas, and (ii) higher gross margin of 15% in 1Q20 vs 14.5% in 1Q19.

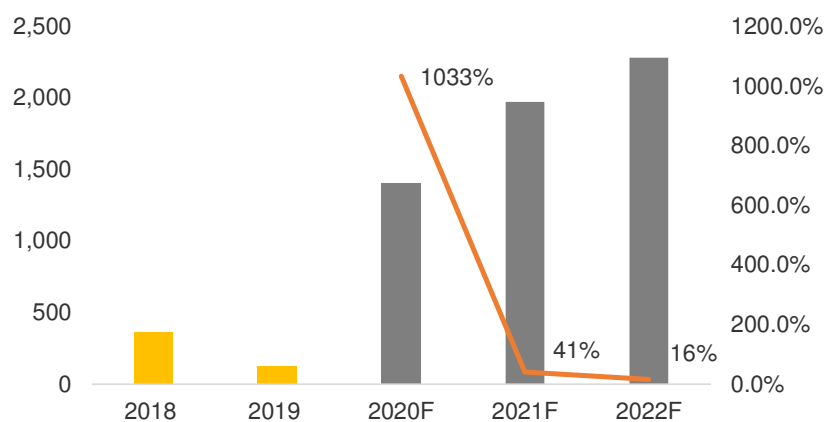
Earnings will continue to surge in FY20F and FY21F

We estimate FY20F profit would increase 10-fold yoy to Bt1.4b in the absence of business restructuring expenses (booked in 2019), coupled with 9 months contribution from TPC and DVN. Earnings would continue to grow by 41%yoy in FY21F to Bt2.0b, driven by:

- (i) full-year contribution from TPC and DVN;
- (ii) higher sales volume following its aggressive customer acquisition strategy, especially in Vietnam where demand for electricity is expected to grow by 10% per annum. Although STARK and the target companies have similar distribution channels, their markets do not overlap. Hence, this is an opportunity to expand its customer base to other countries where the target companies already have branches or partners, such as Vietnam, Cambodia, Myanmar, India, Philippines, Singapore and Australia. Meanwhile, TPC can have access to STARKS customers in 30 countries; and

- (iii) Lower production costs driven by (i) a lean management, (ii) better economies of scale, and (ii) increased bargaining power, will help to lift gross margins. In addition, STARK would have an advantage over suppliers when bargaining for credit terms and selling prices, because of its scale and reputation. For example, it could potentially increase credit terms at TPC and DVN from 60 days currently to up to 270 days, which is what STARK is getting. Its larger scale and reputation would help in negotiation with financial institutions as well. Moreover, the Company has pooled orders with TPC directly from a leading petrochemical company (PTTGC); this cuts off the middleman and would lower its raw material costs.

Figure 17: Earnings growth profile



Source: Company Data, Krungsri Securities

Risk Factors

1. Fluctuations in raw material costs

The most critical raw materials for STARK are copper and aluminum. Their prices are driven mostly by demand and supply. A rapid rise in raw material prices would raise production costs significantly and could affect group turnover. To mitigate this risk, it procures raw materials in advance based on its production plan, which also gives the company better negotiation power. It also applies a cost-plus-margin pricing strategy.

2. Exchange rate

At PTIDL, most of its costs are in USD, most of its revenues are in THB. The level of risk depends on the volume of orders and purchases. PDITL uses several financial instruments to help reduce exchange rate risk, such as advanced sales and purchase agreements, option agreements, etc. It would employ these tools to cover 80-100% of contracts as appropriate. It also has a team to monitor exchange rate trends.

In addition, PDITL also has a policy to support export sales to obtain revenue in USD (natural hedge). It adjusts selling prices to reflect raw material costs and fluctuations in the exchange rate.

3. Risk of PDITL breaching loan covenants set by creditors

PDITL's creditors have set the following restrictions/conditions: (1) interest-bearing debt to equity ratio (IBD-to-Equity) not exceed 1.50 times; and (2) debt service coverage ratio (DSCR) shall not be less than 1.10 times. According to PDITL's financial statements for the years ended 31 December 2018 and 2019, IBD-to-Equity was 5.3 and 6.6 times, respectively, DCSR was 2.1 and 1.4 times, respectively. PDITL has received approval from its creditors for a grace period to reduce the financial ratios by the next accounting period.

However, following the business restructuring, IBD-to-Equity ratio will drop because of additional capital from the (1) private placement (PP) on July 10, 2019; and (2) rights offering (RO) completed in September 2019.

Valuation

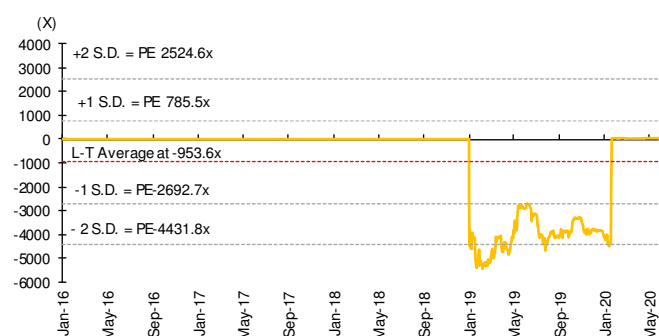
Initiate coverage with **BUY** recommendation and **Bt2.90 TP**, based on 35x FY21F core EPS. We applied a premium valuation to its peers in the same segment (CTW is trading at 26x PER) because the company is entering the rapid-growth cycle, especially after the latest acquisition.

Key Assumptions

Assumption	2020F	2021F	2022F
Copper: Capacity (tons/year)	102,000	102,000	102,000
Copper: Utilization rate (%)	51.8	53.2	60.3
Aluminum: Capacity (tons/year)	90,000	90,000	90,000
Aluminum: Utilization rate (%)	48.3	49.8	56.8
USDTHB	32.0	32.0	32.0
Gross Margin (%)	14.9	15.6	15.6
SG&A/sales (%)	5.0	5.0	5.0
Effective tax rate (%)	20.0	20.0	20.0

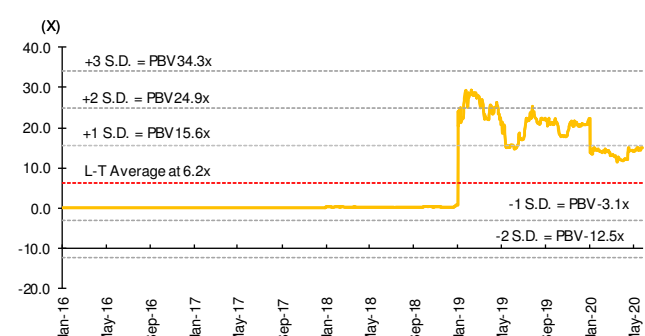
Source: Company Data, Krungsri Securities

P/E Band



Source: Bloomberg, Krungsri Securities

P/BV Band



Source: Bloomberg, Krungsri Securities

Financial statement

Profit and Loss Statement

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Total revenue	(Btm)				11,854	11,529	20,264	25,300	28,646
Cost of goods sold	(Btm)				(10,365)	(10,103)	(17,236)	(21,354)	(24,189)
Gross profit	(Btm)				1,489	1,426	3,029	3,945	4,458
SG&A	(Btm)				(516)	(607)	(1,013)	(1,265)	(1,432)
Other income	(Btm)				81	(84)	20	25	29
Interest expense	(Btm)				(424)	(487)	(293)	(251)	(209)
Pre-tax profit	(Btm)				630	248	1,742	2,455	2,845
Corporate tax	(Btm)				(182)	(145)	(348)	(491)	(569)
Equity a/c profits	(Btm)				5	3	10	13	14
Minority interests	(Btm)				(163)	(118)	0	0	0
Core profit	(Btm)				290	(12)	1,404	1,976	2,291
Extra-ordinary items	(Btm)				72	136	0	0	0
Net profit	(Btm)				362	124	1,404	1,976	2,291
EBITDA	(Btm)				1,232	928	2,280	2,966	3,332
Core EPS	(Bt)				0.90	0.00	0.06	0.08	0.10
Net EPS	(Bt)				1.12	0.01	0.06	0.08	0.10
DPS	(Bt)				0.00	0.00	0.00	0.00	0.00

Balance Sheet

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Total current assets	(Btm)				9,029	8,707	12,464	15,500	17,550
Total long-term assets	(Btm)				4,752	3,948	10,631	10,730	10,796
Total assets	(Btm)				13,781	12,655	23,096	26,230	28,345
Total current liabilities	(Btm)				10,864	8,155	12,505	14,309	15,924
Total long-term liabilities	(Btm)				1,099	2,204	6,873	6,227	4,437
Total liabilities	(Btm)				11,963	10,359	19,379	20,537	20,361
Paid-up capital	(Btm)				357	12,338	12,338	12,338	12,338
Total equity	(Btm)				1,818	2,313	3,717	5,694	7,984
Minority interest	(Btm)				832	46	46	46	46
BVPS	(Bt)				3.05	0.10	0.15	0.24	0.33

Cash Flow Statement

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Core profit	(Btm)				290	(12)	1,404	1,976	2,291
Depreciation and amortization	(Btm)				178	193	244	261	277
Operating cash flow	(Btm)				407	(567)	1,669	1,705	2,384
Investing cash flow	(Btm)				(152)	611	(6,923)	(599)	(566)
Financing cash flow	(Btm)				504	22,260	4,823	(1,093)	(1,874)
Net change in cash	(Btm)				758	22,303	(431)	13	(55)

Key Financial Ratios

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Gross margin	(%)				12.56	12.37	14.94	15.59	15.56
EBITDA margin	(%)				10.39	8.05	11.25	11.73	11.63
EBIT margin	(%)				8.89	6.38	10.04	10.69	10.66
Net profit margin	(%)				3.05	1.07	6.93	7.81	8.00
ROE	(%)				20.48	6.00	46.56	42.00	33.49
ROA	(%)				2.83	0.94	7.85	8.01	8.39
Net D/E	(x)				1.7	1.2	2.2	1.2	0.6
Interest coverage	(x)				2.5	1.5	6.9	10.8	14.6
Payout ratio	(%)				0	0	0	0	0

Main Assumptions

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Copper: Capacity	(tons/year)					30,000	102,000	102,000	102,000
Copper: Utilization rate	(%)					80.0	51.8	53.2	60.3
Aluminum: Capacity	(tons/year)					25,000	90,000	90,000	90,000
Aluminum: Utilization rate	(%)					70.0	48.3	49.8	56.8
USDTHB	Bt/USD					30.9	32.0	32.0	32.0
Gross Margin (%)	(%)					12.4	14.9	15.6	15.6
SG&A/sales (%)	(%)					5.3	5.0	5.0	5.0
Effective tax rate (%)	(%)					58.7	20.0	20.0	20.0

CG Rating 2019 Companies with CG Rating



AAV	ADVANC	AIRA	AKP	AKR	AMA	AMATA	AMATAV	ANAN	AOT	AP	ARROW	BAFS	BANPU
BAY	BCP	BCPG	BOL	BRR	BTS	BTW	BWG	CFRESH	CHEWA	CHO	CK	CKP	CM
CNT	COL	COMAN	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC	EA
EASTW	ECF	EGCO	GBX	GC	GCAP	GEL	GFPT	GGC	GOLD	GPSC	GRAMM	GUNKUL	HANA
HARN	HMPRO	ICC	ICHI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP	K	KBANK	KCE
KKP	KSL	KTB	KTC	KTIS	LH	LHFG	LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC
MCOT	MFEC	MINT	MONO	MTC	NCH	NCL	NKI	NSI	NVD	NYT	OISHI	OTO	PAP
PCSGH	PDJ	PG	PHOL	PJW	PLANB	PLANET	PORT	PPS	PR9	PREB	PRG	PRM	PSH
PSL	PTG	PTT	PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	ROBINS	RS	S	S & J
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCN	SDC	SEAFCO	SEAOL	SE-ED	SELIC
SENA	SIS	SITHAI	SNC	SORKON	SPALI	SPI	SPRC	SSSC	STA	STEC	SVI	SYNTEC	TASCO
TCAP	THAI	THANA	THANI	THCOM	THIP	THREL	TIP	TISCO	TK	TKT	TMB	TMILL	TNDT
TOA	TOP	TRC	TRU	TRUE	TSC	TSR	TSTH	TTA	TTCL	TTW	TU	TVD	TVO
U	UAC	UV	VGI	VIH	WACOAI	WAVE	WHA	WHAUP	WICE	WINNER			



2S	ABM	ADB	AF	AGE	AH	AHC	AIT	ALLA	ALT	AMANA	AMARIN	APCO	APCS
AQUA	ARIP	ASAP	ASIA	ASIAN	ASIMAR	ASK	ASN	ASP	ATP30	AUCT	AYUD	B	BA
BBL	BDMS	BEC	BEM	BFIT	BGC	BGRIM	BIZ	BJC	BJCHI	BLA	BPP	BROOK	CBG
CEN	CENTEL	CGH	CHG	CHOTI	CHOW	CI	CIMBT	CNS	COLOR	COM7	COTTO	CRD	CSC
CSP	DCC	DCON	DDD	DOD	EASON	ECL	EE	EPG	ERW	ESTAR	ETE	FLOYD	FN
FNS	FORTH	FPI	FPT	FSMART	FSS	FVC	GENCO	GJS	GL	GLOBAL	GULF	HPT	HTC
HYDRO	ICN	IFS	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JCK	JCKH	JMART
JMT	JWD	KBS	KCAR	KGI	KIAT	KOOL	KWC	KWM	L&E	LALIN	LANNA	LDC	LHK
LOXLEY	LRH	LST	M	MACO	MAJOR	MBAX	MEGA	METCO	MFC	MK	MODERN	MOONG	MPG
MSC	MTI	NEP	NETBAY	NEX	NINE	NOBLE	NOK	NTV	NWR	OCC	OGC	ORI	OSP
PATO	PB	PDG	PDI	PL	PLAT	PM	PPP	PRECHA	PRIN	PRINC	PSTC	PT	QLT
RCL	RICHY	RML	RWI	S11	SAAM	SALEE	SAMCO	SANKO	SAPPE	SAWAD	SCG	SCI	SCP
SE	SFP	SIAM	SINGER	SIRI	SKE	SKR	SKY	SMIT	SMK	SMPC	SMT	SNP	SONIC
SPA	SPC	SPCG	SPVI	SR	SRICHA	SSC	SSF	SST	STANLY	STPI	SUC	SUN	SUSCO
SUTHA	SWC	SYMC	SYNEX	T	TACC	TAE	TAKUNI	TBSP	TCC	TCMC	TEAM	TEAMG	TFG
TFMAMA	THG	THRE	TIPCO	TITLE	TIW	TKN	TKS	TM	TMC	TMD	TMI	TMT	TNITY
TNL	TNP	TNR	TOG	TPA	TPAC	TPBI	TPCORP	TPOLY	TRITN	TRT	TSE	TSTE	TVI
TVT	TWP	TWPC	UBIS	UEC	UMI	UOBKH	UP	UPF	UPOIC	UT	UWC	VNT	WIJK
XO	YUASA	ZEN	ZMICO										



A	ABICO	ACAP	AEC	AEONTS	AJ	ALUCON	AMC	APURE	AS	ASEFA	AU	B52	BCH
BEAUTY	BGT	BH	BIG	BLAND	BM	BR	BROCK	BSBM	BSM	BTNC	CCET	CCP	CGD
CHARAN	CHAYO	CITY	CMAN	CMC	CMO	CMR	CPL	CPT	CSR	CTW	CWT	D	DIMET
EKH	EMC	EPCO	ESSO	FE	FTE	GIFT	GLAND	GLOCON	GPI	GREEN	GTB	GYT	HTECH
HUMAN	IHL	INGRS	INOX	JTS	JUBILE	KASET	KCM	KKC	KWG	KYE	LEE	LPH	MATCH
MATI	M-CHAI	MCS	MDX	META	MGT	MJD	MM	MVP	NC	NDR	NER	NNCL	NPK
NUSA	OCEAN	PAF	PF	PICO	PIMO	PK	PLE	PMTA	POST	PPM	PROUD	PTL	RCI
RJH	ROJNA	RPC	RPH	SF	SGF	SGP	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP
STI	SUPER	SVOA	TCCC	THE	THMUI	TIGER	TNH	TOPP	TPCH	TPIPP	TPLAS	TQM	TTI
TYCN	UTP	VCOM	VIBHA	VPO	WIN	WORK	WP	WPH	ZIGA				

Disclaimer

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

Anti-corruption Progress Indicator 2019

Companies that have declared their intention to join CAC

2S	ABICO	AF	AI	AIRA	ALT	AMA	AMARIN	AMATA	ANAN	B	BM	BPP	BUI
CHG	CHO	CHOTI	CHOW	CI	CMC	COL	DDD	DELTA	EFORL	EPCO	ESTAR	ETE	FPI
FTE	ICHI	INOX	IRC	ITEL	JAS	JSP	JTS	KWG	LDC	LIT	META	MFEC	MPG
NEP	NOK	NWR	ORI	PRM	PSL	ROJNA	RWI	SAAM	SAPPE	SCI	SEOIL	SHANG	SKR
SPALI	STANLY	SYNEX	TAE	TAKUNI	TMC	TOPP	TPP	TRITN	TVO	UV	UWC	WHAUP	XO
YUASA	ZEN												

Companies certified by CAC

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

N/A

7UP	A	A5	AAV	ABM	ACAP	ACC	ACE	ACG	ADB	AEC	AEONTS	AFC	AGE
AH	AHC	AIT	AJ	AJA	AKR	ALL	ALLA	ALUCON	AMATAV	AMC	AOT	APCO	APEX
APP	APURE	AQ	ARIN	ARIP	AS	ASAP	ASEFA	ASIA	ASIAN	ASIMAR	ASN	ATP30	AU
AUCT	AWC	B52	BA	BAM	BAT-3K	BC	BCT	BDMS	BEAUTY	BEC	BEM	BFIT	BGC
BGT	BH	BIG	BIZ	BJC	BKD	BLAND	BLISS	BOL	BR	BROCK	BSM	BTNC	BTW
CAZ	CBG	CCET	CCP	CGD	CHARAN	CHAYO	CHUO	CITY	CK	CKP	CMAN	CMO	CMR
CNT	COLOR	COMAN	COTTO	CPH	CPL	CPR	CPT	CPW	CRANE	CRD	CSP	CSR	CSS
CTW	CWT	D	DCON	DCORP	DOD	DOHOM	DTCI	EA	EASON	ECF	EE	EIC	EKH
EMC	EPG	ERW	ESSO	EVER	F&D	FANCY	FLOYD	FMT	FN	FORTH	FPT	FSMART	FVC
GENCO	GIFT	GL	GLAND	GLOBAL	GLOCON	GPI	GRAMM	GRAND	GREEN	GSC	GTB	GULF	GYT
HFT	HPT	HTECH	HUMAN	HYDRO	ICN	IFEC	IHL	III	ILINK	ILM	INGRS	INSET	IP
IRCP	IT	ITD	J	JCK	JCKH	JCT	JKN	JMART	JMT	JUBILE	JUTHA	JWD	KAMART
KC	KCM	KDH	KIAT	KKC	KOOL	KTECH	KTIS	KUMWEI	KUN	KWM	KYE	LALIN	LEE
LH	LHFG	LOXLEY	LPH	LST	MACO	MAJOR	MANRIN	MATCH	MATI	MAX	M-CHAI	MCS	MDX
MEGA	METCO	MGT	MIDA	MILL	MITSB	MJD	MK	ML	MM	MODERN	MORE	MPIC	MTC
MVP	NC	NCH	NCL	NDR	NER	NETBAY	NEW	NEWS	NEX	NFC	NOBLE	NPK	NTV
NUSA	NVD	NYT	OHTL	OISHI	OSP	OTO	PACE	PAE	PAF	PERM	PF	PICO	PIMO
PJW	PK	PLE	PMTA	POLAR	POMPUI	PORT	POST	PPM	PPPM	PR9	PRAKIT	PRECHA	PRIME
PRIN	PRO	PROUD	PTL	RAM	RBF	RCI	RCL	RICH	RICHY	RJH	ROCK	ROH	RP
RPC	RPH	RS	RSP	S	S11	SAFARI	SALEE	SAM	SAMART	SAMCO	SAMTEL	SANKO	SAUCE
SAWAD	SAWAN	SCP	SDC	SE	SEAFCO	SEG	SF	SFLEX	SFP	SGF	SHR	SIAM	SIMAT
SINGER	SISB	SKE	SKN	SKY	SLP	SMART	SMT	SOLAR	SONIC	SPA	SPCG	SPG	SPORT
SPVI	SQ	SR	SSC	SSP	STAR	STARK	STC	STEC	STHAI	STI	STPI	SUC	SUN
SUPER	SUTHA	SVH	SVOA	SWC	SYMC	T	TACC	TAPAC	TBSP	TC	TCC	TCCC	TCJ
TCMC	TCOAT	TEAM	TEAMG	TGPRO	TH	THAI	THANA	THE	THG	THL	THMUI	TIGER	TITLE
TIW	TK	TKN	TKS	TM	TMI	TMW	TNDT	TNH	TNPC	TOA	TPAC	TPBI	TPCH
TPIPL	TPIPP	TPLAS	TPOLY	TPS	TQM	TR	TRC	TRT	TRUBB	TSE	TSF	TSI	TSR
TSTE	TTA	TTI	TTT	TTW	TVT	TWP	TWZ	TYCN	UAC	UMI	UMS	UNIQ	UP
UPA	UPF	UPOIC	UREKA	UT	UTP	UVAN	VARO	VCOM	VI	VIBHA	VL	VNG	VPO
VRANDA	WAVE	WG	WIN	WINNER	WORK	WORLD	WP	WPH	WR	YCI	ZIGA	ZMICO	

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, Krungsri Securities Public Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment result."

Reference

Disclosure: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of July 31, 2017) are categorised into:

- Companies that have declared their intention to join CAC
- Companies certified by CAC.

Research Group

Investment Strategy

Isara Ordeedolchest

Head of Research Group, Macro-strategy
+662 659 7000 ext. 5001
Isara.Ordeedolchest@krungsrisecurities.com

Artit Jansawang

Retail Investment Strategy
+662 659 7000 ext. 5005
Artit.Jansawang@krungsrisecurities.com

Nalinee Praman

Assistant Strategist
+662 659 7000 ext. 5011
Nalinee.Praman@krungsrisecurities.com

Varorith Chirachon

Investment Strategy and Wealth Research
+662 659 7000 ext. 5012
Varorith.Chirachon@krungsrisecurities.com

Chaiyot Jiwagkul

Technical Strategy
+662 659 7000 ext. 5006
Chaiyot.Jiwagkul@krungsrisecurities.com

Amornrat Kakanankul

Assistant Analyst, Quantitative Research
+662 659 7000 ext. 5019
Amornrat.Kakanankul@krungsrisecurities.com

Fundamental Research

Naphat Chantaraserekul

Energy, Power Utilities and Petrochemical
+662 659 7000 ext. 5000
Naphat.Chantaraserekul@krungsrisecurities.com

Adisak Prombun

Agribusiness, Food and Construction Services
+662 659 7000 ext. 5013
Adisak.Prombun@krungsrisecurities.com

Ekasit Kunadirekwong

Commerce, Tourism and Transportation (Air)
+662 659 7000 ext. 5010
Ekasit.Kunadirekwong@krungsricurities.com

Phatipak Navawatana

ICT, Media and Transportation (Land)
+662 659 7000 ext. 5003
Phatipak.Navawatana@krungsrisecurities.com

Ratasak Piriyanont

Property, Investment Strategy and Economics
+662 659 7000 ext. 5016
Ratasak.Piriyanont@krungsrisecurities.com

Peerawat Kupatiltpong

Assistant analyst – Property (Property and Industrial Estates)
+662 659 7000 ext. 5008
Peerawat.Kupatiltpong@krungsrisecurities.com

Research Support

Yuphawane Laotrakunchai

Database
+662 659 7000 ext. 5002
Yuphawane.Laotrakunchai@krungsrisecurities.com

Natthakan Phosri

Database
+662 659 7000 ext. 5015
Natthakan.Phosri@krungsrisecurities.com

Krungsri Securities

01 Head Office

898 Ploenchit Tower, 3rd Floor, Ploenchit Road,
Lumpini, Pathumwan, Bangkok 10330
Tel. +662 659 7000 Fax. +662 658 5699

03 Central Bangna

589/151 Central City Tower, 27th Floor, Thepparat
Road, Bangnanua, Bangna, Bangkok 10260
Tel. +662 763 2000 Fax. +662 399 1448

05 Suphanburi

249/171-172 Moo 5, Nen Kaeo Road, Tha Rahat,
Amphur Mueang Suphanburi, Suphanburi 72000
Tel. +663 596 7981 Fax. +663 552 2449

07 Nakhonpathom

67/1 Ratchadamnern Road, Phrapathomjedee, Amphur
Mueang Nakhonpathom, Nakhonpathom 73000
Tel. +663 427 5500-7 Fax. +663 421 8989

09 Phitsanulok

275/1 Pichaisongkhram Road, Nai Muang,
Amphur Mueang Phitsanulok, Phitsanulok 65000
Tel. +665 530 3360 Fax. +665 530 2580

11 Hat yai

90-92-94 Bank of Ayudhya PCL. Hat Yai Branch
Nipat-u-tit Nueng Road, Hat Yai, Amphur Hat Yai,
Songkhla 90110
Tel. +667 422 1229 Fax. +667 422 1411

02 Emporium Tower

622 Emporium Tower, 10th Floor, Sukhumwit 24
Road, Klongtan, Klongtoey, Bangkok 10110
Tel. +662 695 4539-40 Fax. +662 695 4599

04 Rama 2

356, 358, 360 4th Floor, Rama 2 Road, Samaedam,
Bangkhunthian, Bangkok 10150
Tel. +662 013 7145 Fax. +662 895 9557

06 Chonburi

64/17 Sukhumwit Road, Bangplasoi, Amphur
Mueang Chonburi, Chonburi 20000
Tel. +663 312 6 580 Fax. +663 312 6588

08 Chiang Mai

70 Chang Phuak Road, Sri Phum, Amphur Mueang
Chiang Mai, Chiang Mai 50200
Tel. +665 321 9234 Fax. +665 321 9247

10 Khon Kaen

114 Bank of Ayudhya PCL. Khon Kaen Branch Sri
Chan Road, Nai Muang, Amphur Mueang Khon Kaen,
Khon Kaen 40000
Tel. +664 322 6120 Fax. +664 322 6180

Definition of Ratings

BUY: Stocks with expected capital gain above 10% in the next 12 months

HOLD: Stocks with expected capital gain between -10% and +10% in the next 12 months

SELL: Stocks with expected capital gain below -10% in the next 12 months