

## THAI OIL (TOP TB/ TOP.BK)

### ค่าการกลั่นยังเผชิญอุปสรรค

แม้มีอุปสงค์น้ำมันดีเซล และน้ำมันเครื่องบินตลอด ขณะที่สต็อกน้ำมันโลกลดลงอยู่ต่ำกว่าค่าเฉลี่ย 5 ปีย้อนหลัง เรามองแนวโน้มโรงกลั่นอย่างระมัดระวัง เพราะเศรษฐกิจโลกชะลอตัว และนโยบาย zero COVID ของจีนยังคงกดดันอุปสงค์น้ำมัน และอาจเพิ่มแรงกดดันต่อ GRM แนะนำขาย TOP และประเมินราคาเป้าหมายที่ 46 บาท

มีอุปสงค์น้ำมันดีเซล และน้ำมันเครื่องบินอย่างสม่ำเสมอ ขณะที่สต็อกน้ำมันโลกลดลงมาอยู่ระดับต่ำกว่าค่าเฉลี่ย 5 ปีย้อนหลัง

ถึงแม้ว่าข้อมูลที่ได้จากการประชุมนักวิเคราะห์จะอยู่ในเชิงบวก แต่เรายังคงมีมุมมองที่ระมัดระวังต่อแนวโน้มโรงกลั่น เพราะการชะลอตัวของเศรษฐกิจโลก และนโยบาย zero COVID ของจีนจะยังคงเป็นอุปสรรคสำคัญ ทั้งนี้ Crack spread ของน้ำมันดีเซล (ไดอานีสที่ส่งจากอุปสงค์เพิ่มขึ้นจากการที่โรงไฟฟ้าเปลี่ยนจากก๊าซมาใช้น้ำมันแทน) ลดลงแต่ยังอยู่ในระดับสูง ส่วนอุปสงค์น้ำมันเครื่องบินน่าจะแข็งแกร่งมากขึ้นจากการกลับมาของอุปสงค์การเดินทางทางอากาศ ทั้งนี้ เนื่องจากราคา LNG ลดลงมาอยู่ที่ US\$25/mmbtu (จาก US\$45 ใน 3Q) ทำให้ส่วนต่างระหว่างราคาน้ำมันดีเซล (US\$125/bbl) และ LNG (US\$150/bbl) ลดลงมาอยู่ที่ US\$25/bbl จาก US\$100/bbl ใน 3Q เราจึงคาดว่าอุปสงค์จะเพิ่มขึ้น 150k bpd คิดเป็น 1% ของการใช้ น้ำมันดีเซล (และ kerosene) ทั้งโลก นอกจากนี้ เรายังมองว่าน้ำมันดีเซล และน้ำมันเครื่องบินมีหนึ่งปัจจัยบวกในระยะสั้น คือสต็อกน้ำมันโลกที่ลดลงต่ำกว่าค่าเฉลี่ยห้าปีย้อนหลัง

### การส่งออกจากจีนจะเพิ่มแรงกดดันต่อ GRM

โควตาการส่งออกกรอบล่าสุดของจีน 15 ล้านตันที่ประกาศออกมาในเดือนกันยายน จะทำให้โควตาการส่งออกน้ำมันเบนซิน น้ำมันดีเซล และน้ำมันเครื่องบินรวมในปีนี้อยู่ที่ 37.25 ล้านตัน ต่ำกว่าปริมาณการส่งออกในปี 2021 ที่ 39 ล้านตันเล็กน้อย โดยในงวด 9M22 จีนเพิ่งส่งออกน้ำมันเบนซิน น้ำมันดีเซล และน้ำมันเครื่องบินไปเพียง 18.4 ล้านตันเท่านั้น จึงยังเหลือโควตาการส่งออกสำหรับปีอีก 18.9 ล้านตัน ซึ่งหมายความว่ายอดส่งออกรายเดือนในช่วงเดือนตุลาคม-ธันวาคมจะเพิ่มเป็นสามเท่าของยอดส่งออกในช่วง 9M22 อย่างไรก็ตาม จีนอาจจะไม่ได้ใช้โควตาส่วนนี้ให้หมด โดยอาจจะยกยอดบางส่วนไปใช้ในปี 2023 ก็ได้ ซึ่งเราประเมินว่าจะเทียบเท่าการส่งออก 1.1 ล้าน bpd หรือ 3% ของการใช้ น้ำมันดีเซลในเอเชีย เราเชื่อว่า GRM จะยังเผชิญอุปสรรคทั้งจากอุปสงค์ที่อาจจะชะลอตัวลง และอุปทานที่เพิ่มขึ้นจากจีน

คงคำแนะนำขาย และประเมินราคาเป้าหมายที่ 46 บาท; โครงการ CFP คืบหน้าไปแล้ว 88% เมื่อสิ้นเดือนกันยายน 2022

เราคาดว่าจะมีกำลังการกลั่นเพิ่มกลับเข้ามาอีก 2.2 ล้าน bpd หลังการปิดซ่อมบำรุงในเดือนพฤศจิกายน ซึ่งน่าจะเพิ่มแรงกดดันต่อ GRM เรายังคงคำแนะนำขาย และประเมินราคาเป้าหมายที่ 46 บาท โดยอิงจาก PBV ปี FY23F ที่ 0.7x

### Financial Summary

| Year to 31 Dec          | Unit  | 2020     | 2021      | 2022F   | 2023F   | 2024F   |
|-------------------------|-------|----------|-----------|---------|---------|---------|
| Revenue                 | (Btm) | 247,913  | 345,496   | 508,542 | 452,755 | 454,764 |
| Revenue growth          | (%)   | (32.0)   | 39.4      | 47.2    | (11.0)  | 0.4     |
| EBITDA                  | (Btm) | (1,369)  | 31,575    | 32,391  | 20,607  | 21,748  |
| EBITDA growth           | (%)   | (109.3)  | (2,407.1) | 2.6     | (36.4)  | 5.5     |
| Profit, core            | (Btm) | (10,421) | 19,642    | 20,730  | 7,276   | 7,363   |
| Profit growth, core     | (%)   | (351.6)  | (288.5)   | 5.5     | (64.9)  | 1.2     |
| Profit, reported        | (Btm) | (3,301)  | 12,578    | 33,530  | 7,276   | 7,363   |
| Profit growth, reported | (%)   | (152.6)  | (481.0)   | 166.6   | (78.3)  | 1.2     |
| EPS, core               | (Bt)  | (5.1)    | 9.6       | 9.3     | 3.3     | 3.3     |
| EPS growth, core        | (%)   | (351.6)  | (288.5)   | (3.6)   | (64.9)  | 1.2     |
| DPS                     | (Bt)  | 0.7      | 2.6       | 3.0     | 1.5     | 1.5     |
| P/E, core               | (x)   | (10.7)   | 5.7       | 5.9     | 16.7    | 16.5    |
| P/BV, core              | (x)   | 1.0      | 0.9       | 0.8     | 0.8     | 0.8     |
| ROE                     | (%)   | (8.8)    | 16.6      | 14.9    | 4.6     | 4.5     |
| Dividend yield          | (%)   | 1.3      | 4.8       | 5.5     | 2.7     | 2.7     |
| FCF yield               | (%)   | (46.0)   | (29.8)    | (6.5)   | (10.2)  | (10.7)  |

## SELL

Target price Bt46.00 (-15.6%) Price Bt54.50

Total return upside -10.1% Div. yield 5.5%



### Naphat CHANTARASERKUL

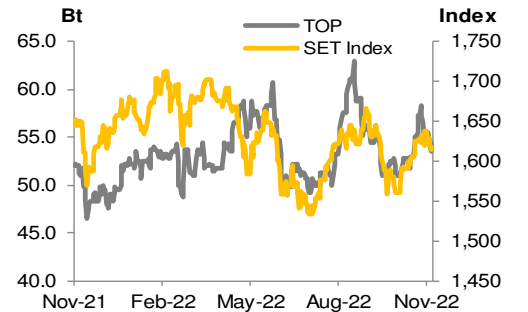
Fundamental investment analyst on securities

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| Key data                   | Unit        |                |
|----------------------------|-------------|----------------|
| 12M high/ low              | (Bt)        | 63.3/ 46.3     |
| Market cap                 | (Btm/ USDm) | 121,744/ 3,404 |
| 3M avg. daily turnover     | (Btm/ USDm) | 850.0/ 23.2    |
| Free float                 | (%)         | 57.4           |
| Issued shares              | (m shares)  | 2,234          |
| <b>Major shareholders:</b> |             |                |
| 1) Ptt Pcl                 |             | 41.1           |
| 2) Stock Exchange Of Th    |             | 13.1           |
| 3) Siam Mgmt Holding Lt    |             | 2.7            |

### Stock price performance



|                     | Unit | ytd  | 1M  | 3M    | 12M  |
|---------------------|------|------|-----|-------|------|
| Total return        | (%)  | 18.5 | 9.2 | (0.9) | 12.3 |
| Total return vs SET | (%)  | 20.9 | 7.7 | 0.4   | 14.3 |

### Krungsri vs Bloomberg consensus

|                     | Unit   | (+)    | (=)    | (-)    |
|---------------------|--------|--------|--------|--------|
| Bloomberg consensus | (Cnt.) | 17     | 5      | 3      |
|                     | Unit   | KSS    | BB     | %diff  |
| Target price        | (Bt)   | 46.00  | 62.62  | (26.5) |
| 2022F net profit    | (Btm)  | 33,530 | 37,462 | (10.5) |
| 2023F net profit    | (Btm)  | 7,276  | 13,559 | (46.3) |

### Earnings revision

| Bloomberg        | Unit | 2022F  | 2023F |
|------------------|------|--------|-------|
| 1M               | (%)  | 1.69   | 9.37  |
| 3M               | (%)  | 21.69  | 2.42  |
| ytd              | (%)  | 299.47 | 40.20 |
| <b>Krungsri</b>  |      |        |       |
| From last report | (%)  | 0.00   | 0.00  |

Source: Bloomberg, Krungsri Securities

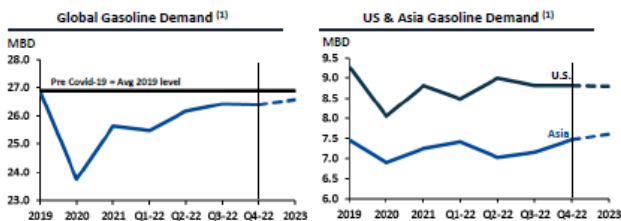
**TOP: 3Q22 Results Review**

| Quarterly P&L (Btm)              | 3Q21         | 4Q21         | 1Q22          | 2Q22          | 3Q22           | Chg qoq      | Chg yoy     |
|----------------------------------|--------------|--------------|---------------|---------------|----------------|--------------|-------------|
| Sales                            | 82,064       | 110,040      | 120,882       | 143,892       | 127,901        | -11%         | 56%         |
| COGS (incl. dep'n)               | (76,028)     | (101,368)    | (103,310)     | (124,004)     | (129,276)      | -4%          | -70%        |
| <b>Gross Profit</b>              | <b>6,036</b> | <b>8,671</b> | <b>17,572</b> | <b>19,887</b> | <b>(1,375)</b> | <b>NA</b>    | <b>NA</b>   |
| SG&A                             | (712)        | (1,112)      | (718)         | (865)         | (908)          | -5%          | -28%        |
| <b>Operating Profit</b>          | <b>5,325</b> | <b>7,560</b> | <b>16,855</b> | <b>19,022</b> | <b>(2,283)</b> | <b>NA</b>    | <b>NA</b>   |
| Net other income/expense         | 697          | (1,623)      | 107           | 11,656        | 316            | -97%         | -55%        |
| Net interest                     | (934)        | (958)        | (961)         | (966)         | (940)          | 3%           | -1%         |
| <b>Pretax profit</b>             | <b>5,087</b> | <b>4,978</b> | <b>16,001</b> | <b>29,713</b> | <b>(2,906)</b> | <b>NA</b>    | <b>NA</b>   |
| Income Tax                       | (213)        | (1,075)      | (1,672)       | (7,509)       | 156            | NA           | NA          |
| Associates                       | 442          | 225          | 44            | (125)         | (294)          | -135%        | NA          |
| Minority interest                | (118)        | (125)        | (149)         | (123)         | (103)          | 16%          | 13%         |
| <b>Profit after tax (pre-ex)</b> | <b>5,199</b> | <b>4,003</b> | <b>14,224</b> | <b>21,955</b> | <b>(3,148)</b> | <b>NA</b>    | <b>NA</b>   |
| Extraordinaries, GW & FX         | (3,136)      | 1,030        | (7,042)       | 3,372         | 3,159          | -6%          | NA          |
| <b>Reported net profit</b>       | <b>2,063</b> | <b>5,033</b> | <b>7,183</b>  | <b>25,327</b> | <b>12</b>      | <b>-100%</b> | <b>-99%</b> |
| Shares out (end Q, m)            | 2,040        | 2,040        | 2,040         | 2,040         | 2,040          |              |             |
| Adjusted shares (m)              | 2,040        | 2,040        | 2,040         | 2,040         | 2,040          |              |             |
| <b>Pre-ex EPS</b>                | <b>2.55</b>  | <b>1.96</b>  | <b>6.97</b>   | <b>10.76</b>  | <b>(1.54)</b>  | <b>NA</b>    | <b>NA</b>   |
| <b>EPS</b>                       | <b>1.01</b>  | <b>2.47</b>  | <b>3.52</b>   | <b>12.41</b>  | <b>0.01</b>    | <b>-100%</b> | <b>-99%</b> |

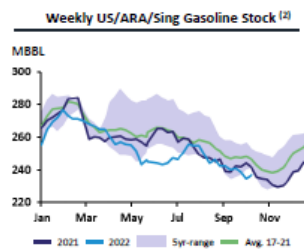
Source: Company, Krungsri Securities

**Exhibit 1: Gasoline market**

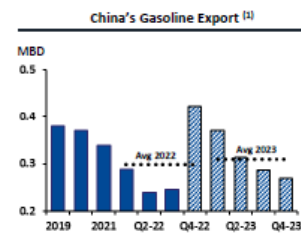
**1 Steady Demand Growth, Pressured by Recession Fears especially in U.S.**



**2 Low Inventories with Stock Below 5-Year Average**



**3 Higher Supply from China with Massive Export Quota**

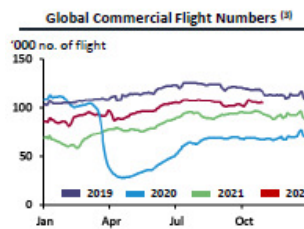


[1] Source: FGE (Oct'22) [3] Source: Flightradar24 (Aug'22)  
[2] Source: Reuters (Oct'22)

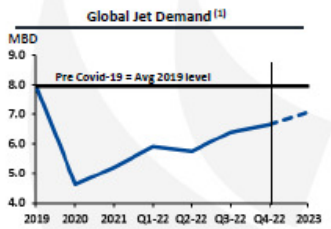
Source: FGE (Oct 22), Reuters (Oct 22)

**Exhibit 2: Jet/Kero market**

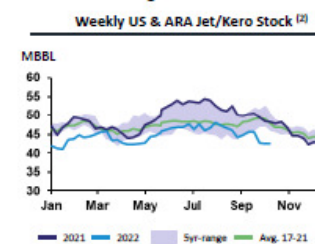
**1 Higher Travelling Activity after Easing Travel Regulation**



**2 Increasing Demand from Travelling and Winter**



**3 Low Inventories with Stock Below 5-Year Average**



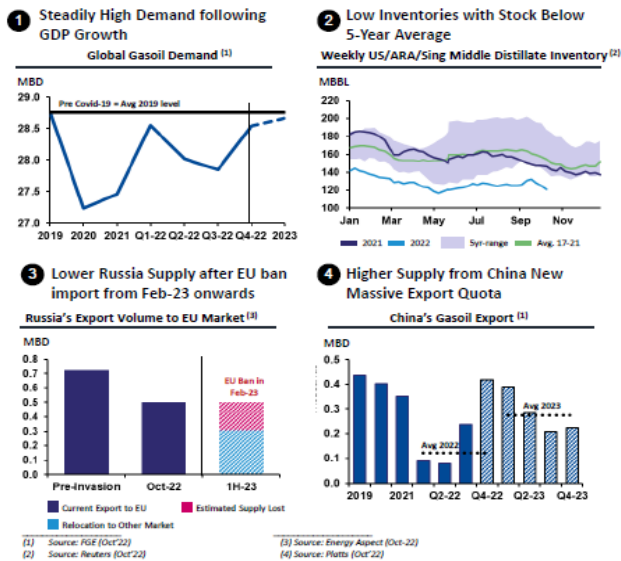
**4 Higher Supply from China with Massive Export Quota**



Source: Flightradar24, FGE (Aug 2022)

**Exhibit 3: Gasoil (Diesel) market**

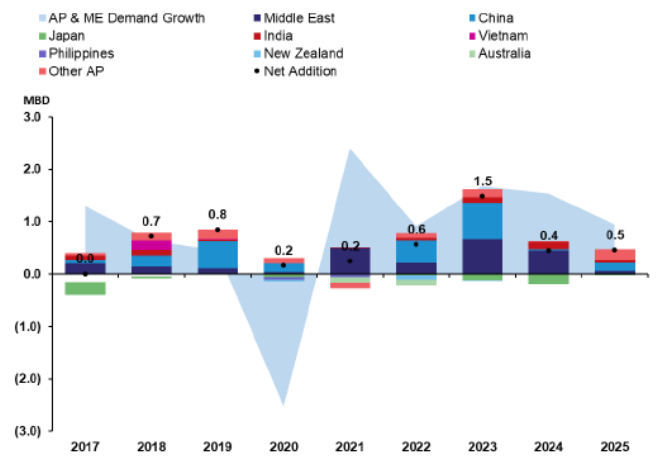
**Gasoil Market**



Source: FGE (Oct 22), Reuters (Oct 22), Energy Aspect (Oct 22), Platts (Oct 22)

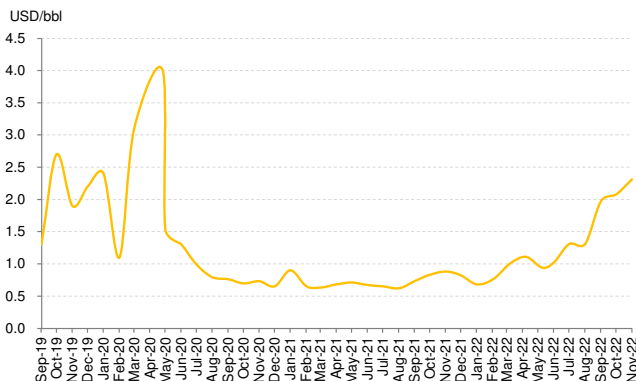
**Exhibit 4: AP/ME effective CDU addition vs additional demand**

**AP/ME Effective CDU Addition VS Additional Demand**



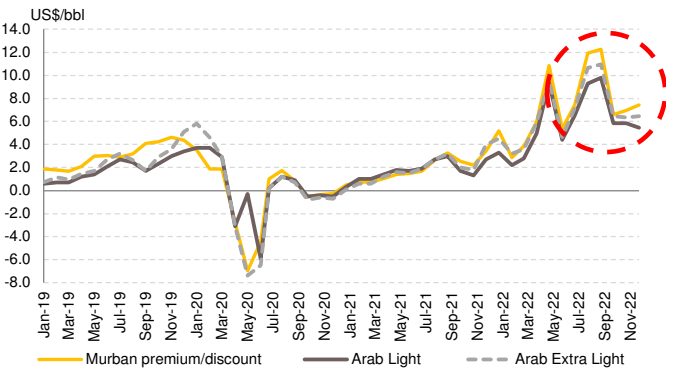
Source: FACTs Semi Annual Reports, Spring 2022

**Freight rate from Middle East to Asia**



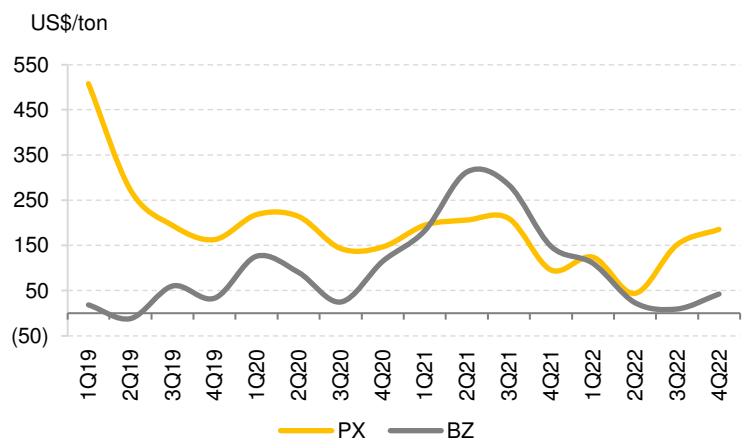
Source: Company data, Krungsri Securities

**Murban and Arab Light crude premiums are falling**



Source: Company data, Krungsri Securities

**PX and BZ spreads**



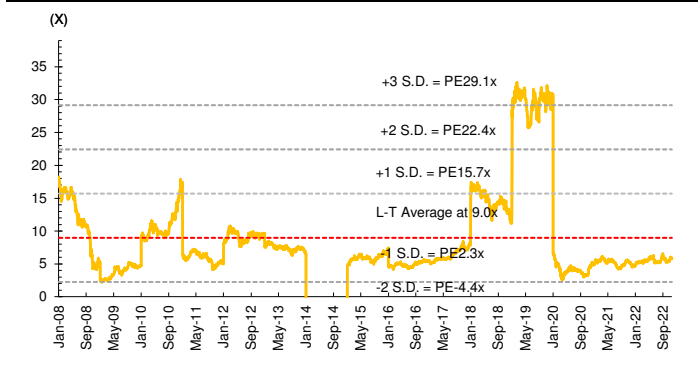
Source: Company data, Krungsri Securities

**Crack spreads over Dubai Crude and TOP's GRM**

|      | Dubai  | Jet    | Diesel | Fuel Oil | Gasoline | TOP's market GRM |
|------|--------|--------|--------|----------|----------|------------------|
| 1Q14 | 104.46 | 17.01  | 17.78  | (8.51)   | 14.56    | 5.10             |
| 2Q14 | 106.13 | 14.29  | 16.04  | (10.65)  | 16.06    | 4.40             |
| 3Q14 | 101.45 | 14.50  | 14.43  | (8.44)   | 13.18    | 4.60             |
| 4Q14 | 74.40  | 17.71  | 15.99  | (5.62)   | 13.44    | 8.20             |
| 1Q15 | 51.89  | 17.08  | 16.29  | (1.86)   | 15.35    | 8.80             |
| 2Q15 | 61.30  | 13.47  | 13.74  | (3.56)   | 19.78    | 7.40             |
| 3Q15 | 49.74  | 10.88  | 10.81  | (8.11)   | 19.32    | 6.60             |
| 4Q15 | 40.71  | 14.09  | 13.77  | (6.55)   | 18.68    | 8.50             |
| 1Q16 | 30.42  | 11.68  | 9.62   | (5.18)   | 18.82    | 6.10             |
| 2Q16 | 43.18  | 11.15  | 10.51  | (8.76)   | 14.45    | 4.40             |
| 3Q16 | 43.17  | 11.15  | 10.96  | (4.27)   | 11.57    | 4.30             |
| 4Q16 | 48.32  | 12.26  | 12.03  | (1.68)   | 14.58    | 6.00             |
| 1Q17 | 53.12  | 11.32  | 11.83  | (3.14)   | 14.78    | 6.50             |
| 2Q17 | 49.77  | 10.81  | 11.38  | (1.85)   | 14.21    | 6.10             |
| 3Q17 | 50.49  | 13.15  | 13.86  | (1.37)   | 16.09    | 8.10             |
| 4Q17 | 59.20  | 13.28  | 13.04  | (3.05)   | 14.40    | 6.00             |
| 1Q18 | 63.73  | 16.11  | 14.76  | (4.96)   | 13.73    | 5.70             |
| 2Q18 | 72.09  | 15.25  | 14.61  | (4.46)   | 12.12    | 4.00             |
| 3Q18 | 74.28  | 14.48  | 14.39  | (2.58)   | 11.55    | 5.00             |
| 4Q18 | 67.42  | 15.64  | 14.78  | 1.35     | 4.70     | 3.90             |
| 1Q19 | 63.53  | 12.97  | 12.79  | 0.52     | 3.70     | 3.00             |
| 2Q19 | 67.36  | 12.21  | 12.37  | (2.33)   | 7.51     | 2.60             |
| 3Q19 | 61.16  | 15.75  | 15.35  | 0.90     | 11.66    | 4.10             |
| 4Q19 | 62.08  | 13.91  | 14.29  | (18.72)  | 12.95    | 2.70             |
| 1Q20 | 49.76  | 8.34   | 10.81  | (7.23)   | 6.55     | 0.10             |
| 2Q20 | 29.84  | (0.10) | 5.73   | (1.63)   | 2.56     | 1.40             |
| 3Q20 | 42.94  | (0.74) | 4.16   | (2.55)   | 4.43     | (1.10)           |
| 4Q20 | 44.62  | 2.42   | 3.69   | (0.56)   | 4.10     | 1.20             |
| 1Q21 | 60.01  | 3.28   | 4.74   | (3.46)   | 7.10     | 0.70             |
| 2Q21 | 66.93  | 4.52   | 5.25   | (5.82)   | 9.90     | 0.40             |
| 3Q21 | 71.67  | 5.31   | 5.35   | (3.33)   | 11.59    | 1.60             |
| 4Q21 | 78.35  | 10.21  | 11.44  | (6.88)   | 15.45    | 5.40             |
| 1Q22 | 95.56  | 16.21  | 19.55  | (8.34)   | 17.77    | 6.40             |
| 2Q22 | 108.05 | 39.16  | 43.11  | (3.20)   | 34.97    | 25.10            |
| 3Q22 | 96.88  | 32.14  | 35.19  | (22.29)  | 13.24    | 6.70             |
| 4Q22 | 90.99  | 33.12  | 42.17  | (26.04)  | 7.13     | 7.00             |

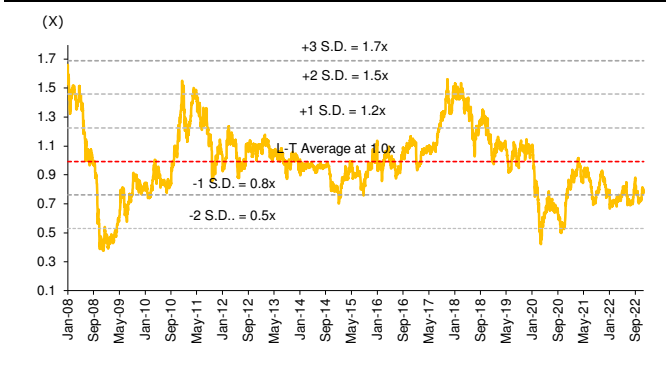
Source: Company data, Krungsri Securities

**P/E Band**



Source: Bloomberg, Krungsri Securities

**P/BV Band**



Source: Bloomberg, Krungsri Securities

**Peer Comparison**

| BB Ticker               | Name                        | Market       | PE          |             | P/BV       |            | EPS          |               | Div        | ROE         | Share Price |              |              |             |
|-------------------------|-----------------------------|--------------|-------------|-------------|------------|------------|--------------|---------------|------------|-------------|-------------|--------------|--------------|-------------|
|                         |                             | Cap<br>US\$  | (x)         | (x)         | (x)        | (x)        | G%           | G%            | (%)        | (%)         | Performance | Performance  | Performance  | Performance |
|                         |                             |              | 22F         | 23F         | 22F        | 23F        | 22F          | 23F           | 22F        | 22F         | 1M          | 3M           | 6M           | ytd         |
| <b>TOP TB</b>           | <b>THAI OIL PCL</b>         | <b>3,406</b> | <b>5.9</b>  | <b>16.7</b> | <b>0.8</b> | <b>0.8</b> | <b>(3.6)</b> | <b>(64.9)</b> | <b>5.5</b> | <b>14.9</b> | <b>5.3</b>  | <b>(4.4)</b> | <b>(7.2)</b> | <b>10.1</b> |
| IRPC TB                 | IRPC PCL                    | 1,715        | 13.1        | 13.9        | 0.7        | 0.7        | (71.6)       | (5.5)         | 5.3        | 5.3         | (2.0)       | (14.3)       | (8.5)        | (21.9)      |
| BCP TB                  | BANGCHAK CORP PCL           | 1,254        | 3.7         | 5.8         | 0.7        | 0.7        | 25.2         | (35.7)        | 13.4       | 23.6        | 6.8         | (3.8)        | (10.6)       | 24.8        |
| SPRC TB                 | STAR PETROLEUM REFINING PCL | 1,395        | 5.0         | 10.6        | 1.3        | 1.2        | 126.8        | (52.5)        | 11.0       | 27.2        | 2.7         | (10.2)       | (4.2)        | 17.3        |
| PTTGC TB                | PTT GLOBAL CHEMICAL PCL     | 5,960        | 9.6         | 11.7        | 0.7        | 0.7        | (48.1)       | (18.4)        | 3.2        | 7.1         | 15.2        | (0.5)        | 0.5          | (19.6)      |
| ESSO TB                 | ESSO THAILAND PCL           | 1,201        | NA          | 7.5         | 1.5        | 1.4        | 7.0          | NA            | 12.7       | 58.8        | (12.1)      | 2.5          | 26.5         | 68.7        |
| BPCL IN                 | BHARAT PETROLEUM CORP LTD   | 8,076        | 13.4        | 6.7         | 1.2        | 1.1        | (0.8)        | 100.9         | 3.8        | 8.3         | 2.8         | (12.4)       | (8.4)        | (21.1)      |
| IOCL IN                 | INDIAN OIL CORP LTD         | 11,953       | 7.8         | 5.6         | 0.7        | 0.7        | 0.4          | 38.8          | 5.7        | 7.7         | 3.7         | (4.8)        | (12.1)       | (7.0)       |
| HPCL IN                 | HINDUSTAN PETROLEUM CORP    | 3,630        | 122.4       | 4.5         | 0.8        | 0.7        | (2.7)        | 2,617.3       | 4.5        | -11.6       | 3.5         | (20.6)       | (14.2)       | (28.5)      |
| RIL IN                  | RELIANCE INDUSTRIES LTD     | 215,221      | 23.3        | 20.3        | 2.0        | 2.0        | (0.1)        | 15.1          | 0.4        | 9.1         | 6.0         | (2.3)        | 2.4          | 9.7         |
| 034730                  | KS SK HOLDINGS CO LTD       | 11,682       | 5.5         | 6.9         | 0.7        | 0.6        | 5.2          | (20.1)        | 3.9        | 13.1        | 2.9         | (10.6)       | (14.9)       | (15.9)      |
| 010950                  | KS S-OIL CORP               | 7,415        | 3.9         | 5.8         | 1.1        | 1.0        | 4.8          | (32.4)        | 8.0        | 32.0        | 6.9         | (4.4)        | (19.8)       | 2.9         |
| 078930                  | KS GS HOLDINGS              | 3,212        | 1.8         | 2.4         | 0.3        | 0.3        | 5.6          | (25.2)        | 5.3        | 19.1        | (2.1)       | 4.8          | 0.7          | 18.4        |
| 5002 JP                 | SHOWA SHELL SEKIYU KK       | NA           | NA          | NA          | 0.0        | 0.0        | NA           | 0.0           | NA         | NA          | NA          | NA           | NA           | NA          |
| CTX AU                  | CALTEX AUSTRALIA LTD        | NA           | 7.9         | 9.6         | 0.0        | 0.0        | NA           | 0.0           | NA         | 23.2        | NA          | NA           | NA           | NA          |
| <b>Average (simple)</b> |                             |              | <b>22.7</b> | <b>10.3</b> | <b>1.0</b> | <b>1.0</b> | <b>3.3</b>   | <b>288.3</b>  | <b>6.5</b> | <b>15.0</b> |             |              |              |             |

Source: Bloomberg, Krungsri Securities

**Financial statement**

| <b>FY December 31</b> | <b>Unit</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022F</b> | <b>2023F</b> | <b>2024F</b> |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| Total revenue         | (Btm)       | 337,388     | 389,344     | 364,327     | 247,913     | 345,496     | 508,542      | 452,755      | 454,764      |
| Cost of goods sold    | (Btm)       | (305,386)   | (373,128)   | (355,756)   | (255,300)   | (319,555)   | (481,026)    | (438,552)    | (440,450)    |
| Gross profit          | (Btm)       | 32,002      | 16,216      | 8,570       | (7,387)     | 25,941      | 27,516       | 14,203       | 14,314       |
| SG&A                  | (Btm)       | (3,461)     | (2,782)     | (2,684)     | (2,650)     | (3,056)     | (4,499)      | (4,005)      | (4,023)      |
| Other income          | (Btm)       | 1,348       | 1,876       | 1,744       | 1,115       | 1,136       | 1,249        | 1,374        | 1,512        |
| Interest expense      | (Btm)       | (3,285)     | (3,942)     | (3,307)     | (4,292)     | (3,595)     | (4,397)      | (6,593)      | (6,699)      |
| Pre-tax profit        | (Btm)       | 26,604      | 11,368      | 4,322       | (13,215)    | 20,426      | 19,869       | 4,980        | 5,104        |
| Corporate tax         | (Btm)       | (5,529)     | (1,983)     | (1,239)     | 647         | (2,034)     | (1,978)      | (496)        | (508)        |
| Equity a/c profits    | (Btm)       | 1,197       | 1,193       | 1,299       | 2,566       | 1,675       | 2,956        | 2,902        | 2,870        |
| Minority interests    | (Btm)       | (463)       | (235)       | (240)       | (419)       | (425)       | (117)        | (110)        | (102)        |
| Core profit           | (Btm)       | 21,808      | 10,343      | 4,143       | (10,421)    | 19,642      | 20,730       | 7,276        | 7,363        |
| Extra-ordinary items  | (Btm)       | 3,048       | (194)       | 2,134       | 7,120       | (7,064)     | 12,800       | 0            | 0            |
| Net Profit            | (Btm)       | 24,856      | 10,149      | 6,277       | (3,301)     | 12,578      | 33,530       | 7,276        | 7,363        |
| EBITDA                | (Btm)       | 37,531      | 22,574      | 14,715      | (1,369)     | 31,575      | 32,391       | 20,607       | 21,748       |
| Core EPS              | (Bt)        | 10.7        | 5.1         | 2.0         | (5.1)       | 9.6         | 9.3          | 3.3          | 3.3          |
| Net EPS               | (Bt)        | 12.2        | 5.0         | 3.1         | (1.6)       | 6.2         | 15.0         | 3.3          | 3.3          |
| DPS                   | (Bt)        | 5.3         | 2.7         | 1.5         | 0.7         | 2.6         | 3.0          | 1.5          | 1.5          |

**Balance Sheet**

| <b>FY December 31</b>       | <b>Unit</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2,021</b> | <b>2022F</b> | <b>2023F</b> | <b>2024F</b> |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Total current assets        | (Btm)       | 126,211     | 164,743     | 134,676     | 114,229     | 101,239      | 141,416      | 126,956      | 119,385      |
| Total long-term assets      | (Btm)       | 101,897     | 103,869     | 148,768     | 191,958     | 260,905      | 274,620      | 287,425      | 299,321      |
| Total assets                | (Btm)       | 228,108     | 268,613     | 283,445     | 306,188     | 362,144      | 416,036      | 414,381      | 418,706      |
| Total current liabilities   | (Btm)       | 33,348      | 38,020      | 38,667      | 28,620      | 38,476       | 56,630       | 51,279       | 51,429       |
| Total long-term liabilities | (Btm)       | 67,612      | 104,121     | 120,854     | 157,449     | 200,574      | 200,574      | 200,574      | 200,574      |
| Total liabilities           | (Btm)       | 100,960     | 142,141     | 159,521     | 186,069     | 239,050      | 257,204      | 251,853      | 252,003      |
| Paid-up capital             | (Btm)       | 20,400      | 20,400      | 20,400      | 20,400      | 20,400       | 22,338       | 22,338       | 22,338       |
| Total equity                | (Btm)       | 122,223     | 121,712     | 119,973     | 116,229     | 120,880      | 156,501      | 160,088      | 164,159      |
| Minority interest           | (Btm)       | 4,925       | 4,760       | 3,951       | 3,889       | 2,213        | 2,331        | 2,441        | 2,543        |
| BVPS                        | (Bt)        | 57.5        | 57.3        | 56.9        | 55.1        | 58.2         | 69.0         | 70.6         | 72.3         |

**Cash Flow Statement**

| <b>FY December 31</b>         | <b>Unit</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2,021</b> | <b>2022F</b> | <b>2023F</b> | <b>2024F</b> |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Core Profit                   | (Btm)       | 21,808      | 10,343      | 4,143       | (10,421)    | 19,642       | 20,730       | 7,276        | 7,363        |
| Depreciation and amortization | (Btm)       | (7,642)     | (7,264)     | (7,085)     | (7,554)     | (7,554)      | (8,125)      | (9,035)      | (9,945)      |
| Operating cash flow           | (Btm)       | 28,598      | 11,973      | (15,740)    | (43,277)    | (23,399)     | (1,329)      | (6,104)      | (6,691)      |
| Investing cash flow           | (Btm)       | (3,750)     | (8,216)     | (32,615)    | (43,658)    | (36,573)     | (19,046)     | (21,242)     | (21,349)     |
| Financing cash flow           | (Btm)       | (6,264)     | (10,420)    | (6,996)     | 891         | (14,596)     | 2,090        | (3,689)      | (3,292)      |
| Net change in cash            | (Btm)       | 17,000      | (1,572)     | (41,489)    | (28,961)    | (79,521)     | 10,646       | (12,103)     | (12,294)     |

**Key Financial Ratios**

| <b>FY December 31</b> | <b>Unit</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2,021</b> | <b>2022F</b> | <b>2023F</b> | <b>2024F</b> |
|-----------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross margin          | (%)         | 9.5         | 4.2         | 2.4         | (3.0)       | 7.5          | 5.4          | 3.1          | 3.1          |
| EBITDA margin         | (%)         | 11.1        | 5.8         | 4.0         | (0.6)       | 9.1          | 6.4          | 4.6          | 4.8          |
| EBIT margin           | (%)         | 8.9         | 3.9         | 2.1         | (3.6)       | 7.0          | 4.8          | 2.6          | 2.6          |
| Net profit margin     | (%)         | 7.4         | 2.6         | 1.7         | (1.3)       | 3.6          | 6.6          | 1.6          | 1.6          |
| ROE                   | (%)         | 19.0        | 8.5         | 3.4         | (8.8)       | 16.6         | 14.9         | 4.6          | 4.5          |
| ROA                   | (%)         | 9.8         | 4.2         | 1.5         | (3.5)       | 5.9          | 5.3          | 1.8          | 1.8          |
| Net D/E               | (x)         | n/a         | 0.0         | 0.3         | 0.6         | 1.2          | 0.9          | 0.9          | 1.0          |
| Interest coverage     | (x)         | 9.1         | 3.9         | 2.3         | (2.1)       | 6.7          | 5.5          | 1.8          | 1.8          |
| Payout Ratio          | (%)         | 43.1        | 53.3        | 48.8        | (43.3)      | 42.2         | 20.0         | 45.0         | 45.0         |

**Main Assumptions**

| <b>FY December 31</b>   | <b>Unit</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2,021</b> | <b>2022F</b> | <b>2023F</b> | <b>2024F</b> |
|-------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| <b>Refinery:</b>        |             |             |             |             |             |              |              |              |              |
| Utilization             | (%)         | 112         | 113         | 103         | 100         | 105          | 108          | 108          | 108          |
| Refined output          | (KBD)       | 308         | 313         | 283         | 303         | 303          | 303          | 303          | 303          |
| GRM                     | (US\$/bbl)  | 6.7         | 4.7         | 3.1         | 0.4         | 3.5          | 10.0         | 5.5          | 6.0          |
| <b>Thai Paraxylene:</b> |             |             |             |             |             |              |              |              |              |
| Utilization             | (%)         | 83          | 89          | 89          | 89          | 89           | 89           | 89           | 89           |
| PX spread               | (US\$/ton)  | 276         | 388         | 300         | 250         | 260          | 270          | 270          | 270          |
| Bz spread               | (US\$/ton)  | 245         | 141         | 150         | 150         | 160          | 170          | 170          | 170          |

**Financial statement**

| <b>FY December 31</b> | <b>Unit</b> | <b>4Q20</b> | <b>1Q21</b> | <b>2Q21</b> | <b>3Q21</b> | <b>4Q21</b> | <b>1Q22</b> | <b>2Q22</b> | <b>3Q22</b> |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total revenue         | (Btm)       | 62,605      | 75,272      | 78,120      | 82,064      | 110,040     | 120,882     | 143,892     | 127,901     |
| Cost of goods sold    | (Btm)       | (58,369)    | (68,214)    | (73,945)    | (76,028)    | (101,368)   | (103,310)   | (124,004)   | (129,276)   |
| Gross profit          | (Btm)       | 4,235       | 7,058       | 4,176       | 6,036       | 8,671       | 17,572      | 19,887      | (1,375)     |
| SG&A                  | (Btm)       | (832)       | (543)       | (690)       | (712)       | (1,112)     | (718)       | (865)       | (908)       |
| Other income          | (Btm)       | (967)       | 198         | 1,864       | 697         | (1,623)     | 107         | 11,656      | 316         |
| Interest expense      | (Btm)       | (1,039)     | (796)       | (907)       | (934)       | (958)       | (961)       | (966)       | (940)       |
| Pre-tax profit        | (Btm)       | 1,397       | 5,917       | 4,443       | 5,087       | 4,978       | 16,001      | 29,713      | (2,906)     |
| Corporate tax         | (Btm)       | (2,385)     | (388)       | (358)       | (213)       | (1,075)     | (1,672)     | (7,509)     | 156         |
| Equity a/c profits    | (Btm)       | 447         | 470         | 537         | 442         | 225         | 44          | (125)       | (294)       |
| Minority interests    | (Btm)       | (146)       | (97)        | (84)        | (118)       | (125)       | (149)       | (123)       | (103)       |
| Core profit           | (Btm)       | (686)       | 5,903       | 4,537       | 5,199       | 4,003       | 14,224      | 21,955      | (3,148)     |
| Extra-ordinary items  | (Btm)       | 7,750       | (2,543)     | (2,415)     | (3,136)     | 1,030       | (7,042)     | 3,372       | 3,159       |
| Net Profit            | (Btm)       | 7,063       | 3,360       | 2,123       | 2,063       | 5,033       | 7,183       | 25,327      | 12          |
| EBITDA                | (Btm)       | 4,502       | 8,336       | 5,299       | 7,185       | 9,489       | 18,687      | 21,027      | (433)       |
| Core EPS              | (Bt)        | (0.34)      | 2.89        | 2.22        | 2.55        | 1.96        | 6.97        | 10.76       | (1.54)      |
| Net EPS               | (Bt)        | 3.46        | 1.65        | 1.04        | 1.01        | 2.47        | 3.52        | 12.41       | 0.01        |

**Balance Sheet**

| <b>FY December 31</b>       | <b>Unit</b> | <b>4Q20</b> | <b>1Q21</b> | <b>2Q21</b> | <b>3Q21</b> | <b>4Q21</b> | <b>1Q22</b> | <b>2Q22</b> | <b>3Q22</b> |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total current assets        | (Btm)       | 114,229     | 103,075     | 104,850     | 91,112      | 101,239     | 132,207     | 171,152     | 149,501     |
| Total long-term assets      | (Btm)       | 191,958     | 200,782     | 215,466     | 254,736     | 260,905     | 266,377     | 272,126     | 291,051     |
| Total assets                | (Btm)       | 306,188     | 303,857     | 320,316     | 345,849     | 362,144     | 398,583     | 443,278     | 440,552     |
| Total current liabilities   | (Btm)       | 28,620      | 25,137      | 38,703      | 34,802      | 38,476      | 109,364     | 120,597     | 98,577      |
| Total long-term liabilities | (Btm)       | 157,449     | 161,197     | 163,049     | 193,441     | 200,574     | 159,649     | 172,068     | 184,260     |
| Total liabilities           | (Btm)       | 186,069     | 186,334     | 201,753     | 228,243     | 239,050     | 269,013     | 292,665     | 282,837     |
| Paid-up capital             | (Btm)       | 20,400      | 20,400      | 20,400      | 20,400      | 20,400      | 20,400      | 20,400      | 22,323      |
| Total equity                | (Btm)       | 116,229     | 114,800     | 115,797     | 115,512     | 120,880     | 127,208     | 148,158     | 155,156     |
| Minority interest           | (Btm)       | 3,889       | 2,723       | 2,767       | 2,093       | 2,213       | 2,362       | 2,455       | 2,560       |
| BVPS                        | (Bt)        | 6           | 6           | 6           | 6           | 6           | 6           | 7           | 7           |

**Cash Flow Statement**

| <b>FY December 31</b>         | <b>Unit</b> | <b>4Q20</b> | <b>1Q21</b> | <b>2Q21</b> | <b>3Q21</b> | <b>4Q21</b> | <b>1Q22</b> | <b>2Q22</b> | <b>3Q22</b> |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Core Profit                   | (Btm)       | (686)       | 5,903       | 4,537       | 5,199       | 4,003       | 14,224      | 21,955      | (3,148)     |
| Depreciation and amortization | (Btm)       | 1,099       | 1,821       | 1,813       | 1,860       | 1,930       | 1,833       | 2,004       | 1,850       |
| Operating cash flow           | (Btm)       | 1,019       | 6,127       | 3,127       | 5,112       | 6,485       | 15,183      | 11,513      | (2,127)     |
| Investing cash flow           | (Btm)       | 14,281      | 8,679       | 11,006      | 5,335       | 8,154       | 5,672       | 5,436       | 13,240      |
| Financing cash flow           | (Btm)       | (7,870)     | 1,376       | (816)       | 29,677      | 7,624       | (11,379)    | (9,004)     | (3,210)     |

**Key Financial Ratios**

| <b>FY December 31</b> | <b>Unit</b> | <b>4Q20</b> | <b>1Q21</b> | <b>2Q21</b> | <b>3Q21</b> | <b>4Q21</b> | <b>1Q22</b> | <b>2Q22</b> | <b>3Q22</b> |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Gross margin          | (%)         | 6.8         | 9.4         | 5.3         | 7.4         | 7.9         | 14.5        | 13.8        | NA          |
| EBITDA margin         | (%)         | 7.2         | 11.1        | 6.8         | 8.8         | 8.6         | 15.5        | 14.6        | NA          |
| EBIT margin           | (%)         | 5.4         | 8.7         | 4.5         | 6.5         | 6.9         | 13.9        | 13.2        | NA          |
| Net profit margin     | (%)         | 11.3        | 4.5         | 2.7         | 2.5         | 4.6         | 5.9         | 17.6        | 0.0         |
| ROE                   | (%)         | 6.1         | 2.9         | 1.8         | 1.8         | 4.2         | 5.6         | 17.1        | 0.0         |
| ROA                   | (%)         | 2.3         | 1.1         | 0.7         | 0.6         | 1.4         | 1.8         | 5.7         | 0.0         |
| Net D/E               | (x)         | 0.6         | 0.8         | 0.9         | 1.3         | 1.2         | 1.1         | 0.8         | 0.8         |
| Interest coverage     | (x)         | 42.3        | 70.6        | 41.7        | 60.4        | 86.7        | 175.7       | 198.9       | NA          |
| Payout Ratio          | (%)         | 20          | 0           | 58          | 0           | 81          | 0           | 16          | 0           |

## CG Rating 2020 Companies with CG Rating



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



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



|        |        |        |        |       |        |       |       |        |      |       |        |       |       |
|--------|--------|--------|--------|-------|--------|-------|-------|--------|------|-------|--------|-------|-------|
| 7UP    | A      | ABICO  | AJ     | ALL   | ALUCON | AMC   | APP   | ARIN   | AS   | AU    | B2     | BC    | BCH   |
| BEAUTY | BGT    | BH     | BIG    | BKD   | BLAND  | BM    | BR    | BROCK  | BSBM | BSM   | BTNC   | CAZ   | CCP   |
| CGD    | CITY   | CMAN   | CMO    | CMR   | CPT    | CPW   | CRANE | CSR    | D    | EKH   | EP     | ESSO  | FMT   |
| GIFT   | GREEN  | GSC    | GTB    | HTECH | HUMAN  | IHL   | INOX  | INSET  | IP   | JTS   | JUBILE | KASET | KCM   |
| KKC    | KUMWEL | KUN    | KWG    | KYE   | LEE    | MATCH | MATI  | M-CHAI | MCS  | MDX   | MJD    | MM    | MORE  |
| NC     | NDR    | NER    | NFC    | NNCL  | NOVA   | NPK   | NUSA  | OCEAN  | PAF  | PF    | PK     | PLE   | PMTA  |
| POST   | PPM    | PRAKIT | PRECHA | PRIME | PROUD  | PTL   | RBF   | RCI    | RJH  | ROJNA | RP     | RPH   | RSP   |
| SF     | SFLEX  | SGP    | SISB   | SKN   | SLP    | SMART | SOLAR | SPG    | SQ   | SSP   | STARK  | STC   | SUPER |
| SVOA   | TC     | TCCC   | THMUI  | TNH   | TOPP   | TPCH  | TPIPP | TPLAS  | TTI  | TYCN  | UKEM   | UMS   | VCOM  |
| VRANDA | WIN    | WORK   | WPH    |       |        |       |       |        |      |       |        |       |       |

## 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 2020

## Companies that have declared their intention to join CAC

|     |       |       |      |       |       |     |       |      |        |     |       |       |      |
|-----|-------|-------|------|-------|-------|-----|-------|------|--------|-----|-------|-------|------|
| 7UP | ABICO | APURE | B52  | BKD   | BROCK | CI  | ESTAR | EVER | FSMART | J   | JKN   | JMART | JMT  |
| JSP | LDC   | MAJOR | NCL  | NOBLE | PK    | PLE | SHANG | SKR  | SPALI  | SSP | SUPER | TGH   | THAI |
| TQM | TTA   | WIN   | ZIGA |       |       |     |       |      |        |     |       |       |      |

## Companies certified by CAC

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

## N/A

|        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3K-BAT | A      | A5     | AAV    | ABM    | ACAP   | ACC    | ACE    | ACG    | ADB    | ADD    | AEC    | AEONTS | AFC    |
| AGE    | AH     | AHC    | AIT    | AJ     | AJA    | AKR    | ALL    | ALLA   | ALT    | ALUCON | AMARIN | AMC    | ANAN   |
| AOT    | APCO   | APEX   | APP    | AQ     | ARIN   | ARIP   | AS     | ASAP   | ASEFA  | ASIA   | ASIAN  | ASIMAR | ASN    |
| ASP    | ASW    | ATP30  | AU     | AUCT   | AWC    | AYUD   | BA     | BC     | BCT    | BDMS   | BEAUTY | BEC    | BEM    |
| BFIT   | BGT    | BH     | BIG    | BIZ    | BJC    | BLAND  | BLISS  | BM     | BOL    | BR     | BSM    | BTNC   | BTW    |
| BUI    | CAZ    | CBG    | CCET   | CCP    | CGD    | CHARAN | CHAYO  | CHG    | CHO    | CITY   | CK     | CKP    | CMAN   |
| CMO    | CMR    | CNT    | COLOR  | COMAN  | CPH    | CHPL   | CPR    | CPT    | CPW    | CRANE  | CRC    | CRD    | CSP    |
| CSR    | CSS    | CTW    | CWT    | D      | DCON   | DDD    | DHOUSE | DITTO  | DMT    | DOD    | DOHOME | DTCI   | DV8    |
| EASON  | ECF    | EE     | EFORL  | EKH    | EMC    | ESSO   | ETC    | F&D    | FANCY  | FLOYD  | FMT    | FN     | FORTH  |
| FVC    | GENCO  | GIFT   | GL     | GLAND  | GLOBAL | GRAMMY | GRAND  | GREEN  | GSC    | GTB    | GULF   | GYT    | HFT    |
| HPT    | HTECH  | HUMAN  | HYDRO  | ICN    | IFEC   | IHL    | IIG    | III    | ILM    | IMH    | IND    | INGRS  | INOX   |
| INSET  | IP     | IRCP   | IT     | ITD    | JAK    | JAS    | JCK    | JCKH   | JCT    | JR     | JTS    | JUBILE | JUTHA  |
| JWD    | KAMART | KC     | KCM    | KDH    | KEX    | KIAT   | KISS   | KK     | KKC    | KOOL   | KTIS   | KUMWEL | KUN    |
| KWM    | KYE    | LALIN  | LEE    | LEO    | LH     | LIT    | LOXLEY | LPH    | LST    | MACO   | MANRIN | MATCH  | MATI   |
| MAX    | M-CHAI | MCS    | MDX    | MEGA   | METCO  | MGT    | MICRO  | MIDA   | MILL   | MITSIB | MJD    | MK     | ML     |
| MODERN | MORE   | MPIC   | MUD    | MVP    | NC     | NCAP   | NCH    | NDR    | NER    | NETBAY | NEW    | NEWS   | NEX    |
| NFC    | NOVA   | NPK    | NRF    | NSL    | NTV    | NUSA   | NVD    | NYT    | OHTL   | OISHI  | OR     | OSP    | OTO    |
| PACE   | PACO   | PAE    | PAF    | PERM   | PF     | PICO   | PIMO   | PJW    | PMTA   | POLAR  | POMPUI | PORT   | POST   |
| PPM    | PR9    | PRAKIT | PRAPAT | PRECHA | PRIME  | PRIN   | PRO    | PROEN  | PROS   | PROUD  | PTL    | RAM    | RBF    |
| RCI    | RCL    | RICHY  | RJH    | ROCK   | ROH    | ROJNA  | RP     | RPC    | RPH    | RS     | RSP    | RT     | S      |
| S11    | SA     | SABUY  | SAFARI | SAK    | SALEE  | SAM    | SAMART | SAMCO  | SAMTEL | SANKO  | SAUCE  | SAWAD  | SAWANG |
| SCGP   | SCI    | SCM    | SCP    | SDC    | SE     | SEAFCO | SF     | SFLEX  | SFT    | SGF    | SHR    | SIAM   |        |
| SICT   | SIMAT  | SISB   | SK     | SKE    | SKN    | SKY    | SLM    | SLP    | SMART  | SMD    | SMT    | SO     | SOLAR  |
| SONIC  | SPA    | SPCG   | SPG    | SPVI   | SQ     | SR     | SSC    | STANLY | STAR   | STARK  | STC    | STEC   | STGT   |
| STHAI  | STI    | STPI   | SUC    | SUN    | SUTHA  | SVH    | SVOA   | SWC    | SYNEX  | T      | TACC   | TAPAC  | TC     |
| TCC    | TCCC   | TCJ    | TCOAT  | TEAM   | TEAMG  | TGPRO  | TH     | THANA  | THE    | THG    | THL    | THMUI  | TIDLOR |
| TIGER  | TITLE  | TK     | TKN    | TM     | TMC    | TMI    | TMW    | TNDT   | TNH    | TNPC   | TOA    | TPAC   | TPBI   |
| TPCH   | TIPL   | TIPIP  | TPLAS  | TPOLY  | TPS    | TQR    | TR     | TRC    | TRITN  | TRT    | TRUBB  | TSE    | TSF    |
| TSI    | TSR    | TSTE   | TTI    | TTT    | TTW    | TVT    | TWP    | TWZ    | TYCN   | UAC    | UMI    | UMS    | UNIQ   |
| UP     | UPA    | UPOIC  | UREKA  | UT     | UTP    | UVAN   | VARO   | VCOM   | VI     | VIBHA  | VL     | VNG    | VPO    |
| VRANDA | W      | WAVE   | WGE    | WINMED | WINNER | WORK   | WORLD  | WP     | WPH    | WR     | XPG    | YCI    | YGG    |
| YUASA  |        |        |        |        |        |        |        |        |        |        |        |        |        |

## 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 January, 30 2021) are categorised into:

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

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### 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