

# China Aviation (Singapore) Oil

Soar into the sky

## SINGAPORE | OIL AND GAS | RESULTS

- Share of profit from associates and JVs met 75% of our full year expectations of US\$45.0mn
- US\$47.8mn net profit met 67.8% of our full year expectations of US\$70.5mn
- Switched valuation method from discounted FCFE to PE ratio. We upgrade to **"Buy"** rating with a **higher TP of S\$1.92**, implying a 31.5% return from the last closed price of S\$1.46.

### Results at a glance

(US\$ mn)	1H16	1H15	y-y (%)	Comments
Revenue	4,487.6	4,605.0	↓(2.5)	Due mainly to the decline in jet fuel prices averaged at US\$49.02/bbl in 1H16 (vs US\$73.45/bbl in 1H15), but the price downturn was partially offset by the increase in revenue of other oil products
Gross profit	23.1	14.5	↑59.1	Due mainly to the increase in jet fuel volume imported to China and higher gains from trading and optimisation activities
Operating profit	16.1	10.6	↑51.5	Due mainly to higher administrative costs offset by the drop in other operating and interest expenses
Associates and JVs	33.5	22.8	↑47.0	Due mainly to higher profit contributions from Pudong (US\$29.61mn in 1H16 vs US\$20.9mn in 1H15) and 275.8%YoY growth in OKYC (US\$2.5mn in 1H16 vs US\$0.66mn in 1H15)
Net profit	47.8	32.1	↑48.6	Due to higher tax expenses resulting from the recognition of deferred tax liabilities and provision of income tax

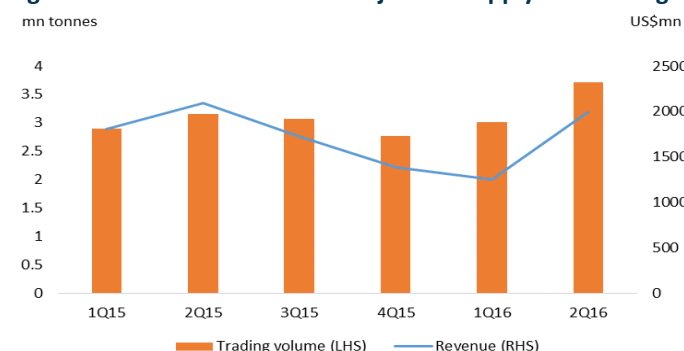
Source: Company, Phillip Securities Research (Singapore)

**CAO is expanding its business and improving profitability.** In view of higher working capital (which could lead to declining or even negative CFOs), we think that PER is a more appropriate valuation method. Based on the average forward PER of 14.2x from its peers and an estimated FY16 EPS of US\$10.1 cents (S\$13.5 cents), we derived a higher **TP of S\$1.92** and upgrade our rating to **Buy**.

**Low oil price fueled aviation sector boom, benefiting aviation fueling business correspondingly**

CAO performed outstandingly in 1H16 with mid double-digit growth in gross, operating, and net profit, albeit the top line dipped slightly. Riding on the growth of global civil aviation traffic, CAO's jet fuel supply has been experiencing strong demand, especially in China market. The jet fuel supply and trading volume increased by 11.77% yoy to 6.74mn tonnes in 1H16, which offset the 49.8% yoy decrease in jet fuel price. As a result, the revenue dropped moderately by 16.6% yoy to US\$3,247.3mn in 1H16.

**Figure 1. Revenue and volume of jet fuel supply and trading**



Source: Company, PSR

2 August 2016

### Buy (Upgraded)

CLOSING PRICE	SGD 1.460
FORECAST DIV	SGD 0.030
TARGET PRICE	SGD 1.920
TOTAL RETURN	33.6%

### COMPANY DATA

O/S SHARES (MN) :	883
MARKET CAP (USD mn / SGD mn) :	619 / 892
52 - WK HI/LO (SGD) :	11 / 0.97
3M Average Daily T/O (mn) :	1.16

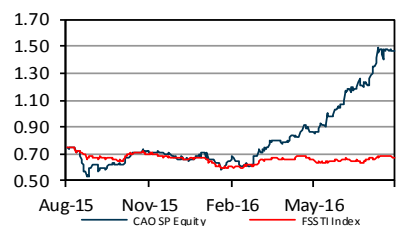
### MAJOR SHAREHOLDERS (%)

CHINA NATIONAL AVIATION FUEL GRP	510%
BP PLC	20.1%

### PRICE PERFORMANCE (%)

	1M TH	3M TH	1YR
COMPANY	0.0	(2.9)	8.1
STI RETURN	(4.6)	(9.2)	(16.5)

### PRICE VS. STI



Source: Bloomberg, PSR

### KEY FINANCIALS

Y/E Dec, USD mn	FY 15	FY 16e	FY 17e	FY 18e
Revenue	8977	8792	10277	12209
Net Profit	613	86.8	105.8	130.3
EPS (cents)	7.1	10.1	12.3	15.1
P/E (x)	7.4	14.2	11.7	9.5
P/B (x)	10	2.6	2.4	2.3
Dividend (Cents)	3.0	3.0	3.7	4.5
Dividend Yield, %	4.2	16	19	2.4

Source: Company Data, PSR est.

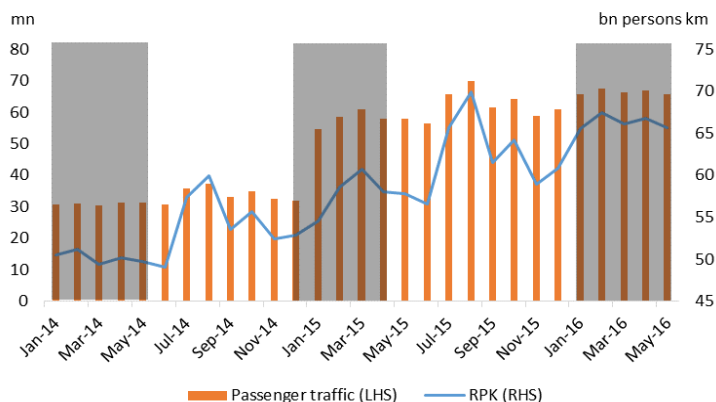
### VALUATION METHOD

P/E Multiple (PER:14.2x)

Chen Guangzhi (+65 6212 1859)  
chengz@phillip.com.sg

According to China Aviation Administration of China (CAAC), the revenue passenger kilometer (RPK) in China increased by 14.5% yoy to 331.5 bn persons kilometer from Jan-16 to May-16, together with 10.7% yoy increase in passenger during the same period. Referring to Figure 2 and 3, not only the China air traffic is trending up, but global air passenger volume is also on an upward trajectory. International Air Transport Association (IATA) reported a 6% yoy RPK growth in the first 5 months. Since China is still the biggest market for CAO, we expect that the jet fuel trading volume will grow by 13% in FY16.

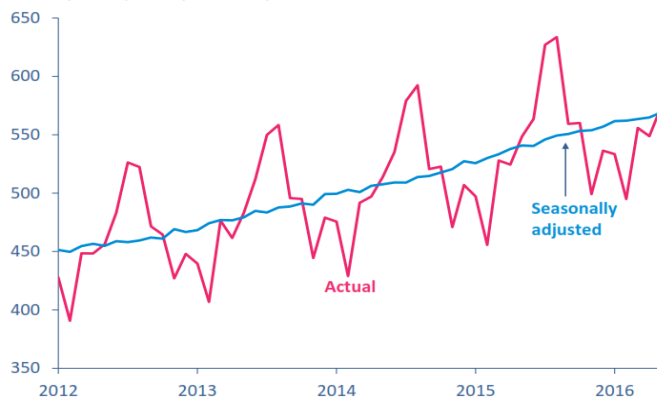
**Figure 2. China RPK and passenger traffic**



Source: CAAC, PSR

**Figure 3. Air passenger volumes**

Industry RPKs (billion per month)

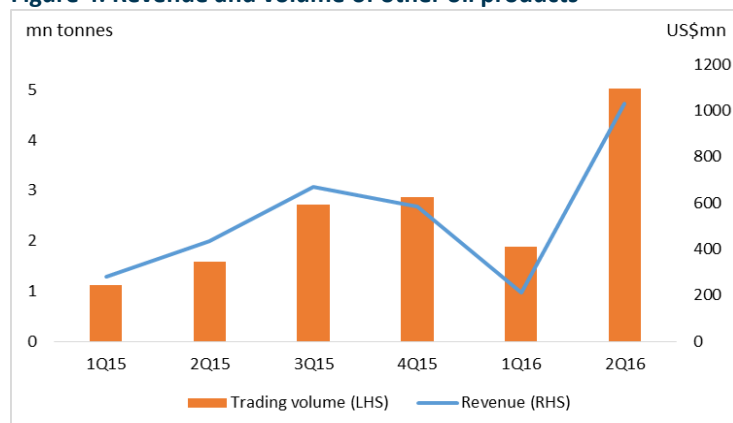


Source: IATA Economic, IATA Monthly Statistics

### Gains from other oil products trading surged, proving the success of product mix diversification

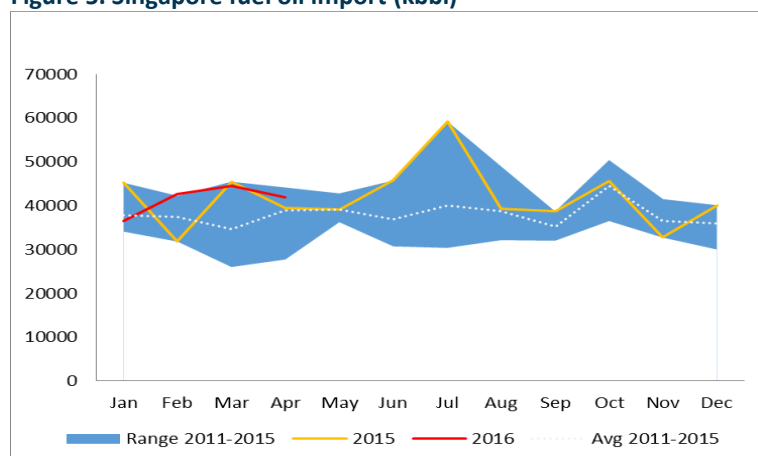
In 1H16, the revenue contributed by the oil product trading segment amounted to US\$1,240.3mn with 74.1% yoy up. The high double-digit growth was attributable to the 154.2% yoy increase in trading volume which reach 6.89mn tonnes. The segment mainly engage in fuel oil and gas oil trading, with fuel oil being the major revenue generator. Referring to Figure 4 and 5, according to Joint Organizations Data Initiative, the import and export volumes of fuel oil in Singapore improved in the first 4 month this year, and are hovering above their 5-year averages. Riding on the upward momentum, we expect CAO to see stronger growth in fuel oil trading in Singapore in the foreseeable future.

Figure 4. Revenue and volume of other oil products



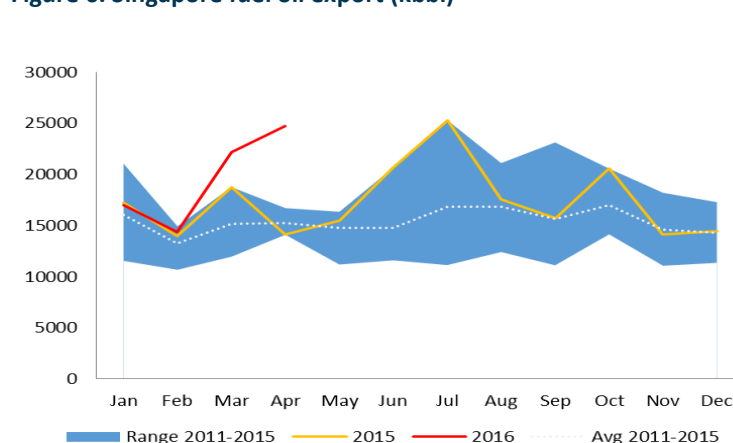
Source: Company, PSR

Figure 5. Singapore fuel oil import (kbbbl)



Source: Jodi, PSR

Figure 6. Singapore fuel oil export (kbbbl)

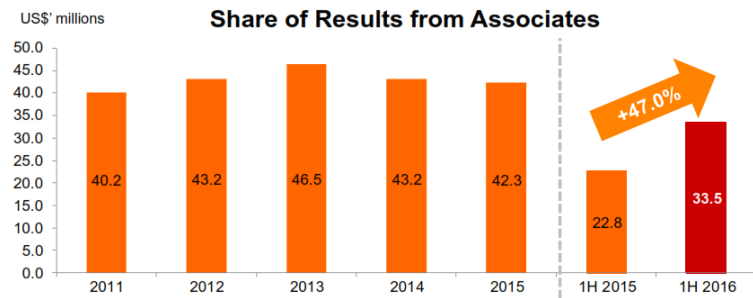


Source: Jodi, PSR

#### Investments in associates and joint ventures enhance the profitability substantially

SPIA's shared profit boosted by 41.4% yoy, amounting to US\$29.6mn. The substantial increment was mainly due to higher refueling volume and profit margin which resulted from the oil price recovery in 1H16. Due to higher operating profit from storage leasing activities, profit from OKCY, with the largest growth of 275.8% yoy, amounted to US\$2.5mn during the same period. Though Xinyuan's profit declined, as well as CNAF HKR made further loss, the overall investment portfolio is still robust and should see higher growth in 2H16.

Figure 7



Source: Company

### Medium-term catalyst: China government plans to build more than 500 airports by 2020

The State Council guided that China will have more than 500 general aviation airports in major agricultural areas, major forest regions, and over 50% of 5A tourist scenic spots by 2020. At the same time, it also further opens up lower altitude airspace for civilian use. Since CAO has been actively seeking expansionary deployment in oil-related fields, this could pose a good opportunity for the Group to widen its jet-fuel supply networks as well as to increase its equity investment. We think that its monopolistic position of CAO and its parent company CNAF could give it an edge in gaining market share.

### Valuation

CAO will leverage on the low oil price period and lift the trading volume of both jet fuel and other transportation fuels, hence it is expected to increase its working capital expenditures. Therefore the discounted FCFE model applied previously was not suitable given the FCFE will decline or even be negative in the near future. Now we change to PE model which is more applicable.

We use World Fuel Services, Bangkok Aviation Fuel, and San-Ai Oil as peers. World fuel Services is a global transportation fuels provider, which is a goal CAO aims to achieve. The rest of the companies are single region fuel providers.

Based on our FY16e EPS of US\$10.1 cents (S\$13.5 cents) and the average forward PER of 14.2x, we derived a higher TP of **SG\$1.92** and upgrade to **Buy**.

### Peer comparison

Company	Bloomberg Ticker	Mkt Cap (SGD mn)	EV (SGD mn)	EV/EBITDA TTM	P/E	P/B	FRW P/E	Net D/E (%)	ROA (%)	ROE (%)
China Aviation Oil Singapore Corp Ltd	CAO SP	1,262.7	1,033.8	21.4	12.2	1.5	13.1	Net Cash	3.8	5.8
<b>United States</b>										
World Fuel Services Corp	INT US	4,502.7	4,606.7	10.9	17.6	1.7	14.5	9.9	3.7	9.6
<b>Thailand</b>										
Bangkok Aviation Fuel Services PCL	BAFS TB	953.2	934.1	10.3	24.4	4.1	19.7	0.4	11.5	18.1
<b>Japan</b>										
San-Ai Oil Co Ltd	8097 JP	644.3	504.6	CA	9.3	0.6	8.5	Net Cash	2.8	6.9
<b>Average</b>				<b>10.6</b>	<b>17.1</b>	<b>2.2</b>	<b>14.2</b>	<b>5.1</b>	<b>6.0</b>	<b>11.5</b>

Source: Bloomberg, Phillip Securities Research (Singapore) Estimates

## Financials

### Income Statement

Y/E Dec, USD mn	FY14	FY15	FY16e	FY17e	FY18e
Revenue	17,061	8,977	8,792	10,277	12,209
Cost of sales	(17,034)	(8,942)	(8,748)	(10,224)	(12,144)
<b>Gross profit</b>	<b>27.4</b>	<b>35.4</b>	<b>43.9</b>	<b>52.8</b>	<b>64.8</b>
<b>Operating profit</b>	<b>10.9</b>	<b>22.3</b>	<b>32.0</b>	<b>39.1</b>	<b>48.4</b>
Finance costs	(3.1)	(1.0)	(1.2)	(1.2)	(0.8)
Associates & JVs	43.2	42.3	58.6	71.1	86.7
<b>Profit before tax</b>	<b>51.0</b>	<b>63.6</b>	<b>89.4</b>	<b>109.0</b>	<b>134.2</b>
Tax expense	(1.9)	(2.3)	(2.6)	(3.2)	(3.9)
<b>Net profit</b>	<b>49.2</b>	<b>61.3</b>	<b>86.8</b>	<b>105.8</b>	<b>130.3</b>
<b>Net profit, adj.</b>	<b>49.2</b>	<b>61.3</b>	<b>86.8</b>	<b>105.8</b>	<b>130.3</b>

### Per share data (cents)

Y/E Dec	FY14	FY15	FY16e	FY17e	FY18e
EPS, reported	5.7	7.1	10.1	12.3	15.1
EPS, adj.	5.7	7.1	10.1	12.3	15.1
DPS	2.0	3.0	3.0	3.7	4.5
BVPS	64.1	68.7	78.0	86.3	96.5

### Cash Flow

Y/E Dec, USD mn	FY14	FY15	FY16e	FY17e	FY18e
<b>CFO</b>					
Net profit	49.2	61.3	86.8	105.8	130.3
Adjustments	(35.5)	(40.1)	(55.9)	(66.6)	(81.4)
WC changes	36.1	32.8	4.6	(33.0)	(38.0)
Cash generated from ops	49.8	54.0	35.5	6.2	10.8
Others	(2.6)	(1.9)	(2.0)	(2.0)	(2.0)
<b>Cashflow from ops</b>	<b>47.2</b>	<b>52.1</b>	<b>33.5</b>	<b>4.2</b>	<b>8.8</b>
<b>CFI</b>					
CAPEX, net	(0.5)	(0.4)	(0.5)	(0.5)	(0.5)
Divd from associates & JVs	35.1	37.2	49.8	60.4	73.7
Others	0.3	0.4	0.5	0.5	0.5
<b>Cashflow from investments</b>	<b>35.0</b>	<b>37.2</b>	<b>49.9</b>	<b>60.4</b>	<b>73.7</b>
<b>CFF</b>					
Loans, net of repayments	(28.6)	-	41.7	(41.7)	-
Dividends	(13.7)	(12.8)	(25.8)	(26.0)	(31.7)
Others	(1.5)	(0.3)	-	-	-
<b>Cashflow from financing</b>	<b>(43.9)</b>	<b>(13.0)</b>	<b>15.9</b>	<b>(67.8)</b>	<b>(31.7)</b>
<b>Net change in cash</b>	<b>38.3</b>	<b>76.3</b>	<b>99.3</b>	<b>(3.2)</b>	<b>50.8</b>
Effects of exchange rate	(0.4)	(0.1)	-	-	-
<b>Ending cash</b>	<b>94.3</b>	<b>170.5</b>	<b>269.8</b>	<b>266.6</b>	<b>317.3</b>

### Balance Sheet

Y/E Dec, USD mn	FY14	FY15	FY16e	FY17e	FY18e
<b>ASSETS</b>					
PP&E	6.8	6.2	5.6	5.1	4.5
Intangibles	2.4	1.8	1.3	0.8	0.3
Associates & JVs	270.1	265.6	294.5	294.5	294.5
Others	7.6	7.6	7.6	7.6	7.6
<b>Total non-current assets</b>	<b>286.9</b>	<b>281.3</b>	<b>309.1</b>	<b>308.0</b>	<b>306.9</b>
Inventories	38.1	56.8	61.8	90.2	119.1
Receivables	959.4	337.5	433.6	557.5	728.5
Cash	94.3	170.5	269.8	266.6	317.3
<b>Total current assets</b>	<b>1,092</b>	<b>565</b>	<b>765</b>	<b>914</b>	<b>1,165</b>
<b>Total Assets</b>	<b>1,379</b>	<b>846</b>	<b>1,074</b>	<b>1,222</b>	<b>1,472</b>

### LIABILITIES

Others	6.2	6.2	7.5	7.5	7.5
<b>Total non-current liabilities</b>	<b>6.2</b>	<b>6.2</b>	<b>7.5</b>	<b>7.5</b>	<b>7.5</b>
Payables	818.9	246.9	352.5	471.9	633.7
Loans and borrowings	-	-	41.7	-	-
Others	0.0	0.3	-	-	-
<b>Total current liabilities</b>	<b>819.0</b>	<b>247.3</b>	<b>394.2</b>	<b>471.9</b>	<b>633.7</b>
<b>Total Liabilities</b>	<b>825.2</b>	<b>253.4</b>	<b>401.8</b>	<b>479.4</b>	<b>641.2</b>

### EQUITY

Share capital	215.6	215.6	215.6	215.6	215.6
Reserves	337.9	377.1	456.9	527.4	615.1
<b>Total equity</b>	<b>553.5</b>	<b>592.6</b>	<b>672.5</b>	<b>742.9</b>	<b>830.7</b>

### Valuation Ratios

Y/E Dec	FY14	FY15	FY16e	FY17e	FY18e
P/E (x)	8.7	7.4	14.2	11.7	9.5
P/B (x)	1.0	1.0	2.6	2.4	2.3
EV/EBITDA (x)	38.8	18.4	41.2	34.1	26.7
Dividend yield (%)	3%	4%	2%	2%	2%

### Growth & Margins (%)

<b>Growth</b>					
Revenue	9.6%	-47.4%	-2.1%	16.9%	18.8%
Gross profit	-47.8%	29.4%	23.8%	20.4%	22.7%
Operating profit	-65.1%	104.8%	43.2%	22.2%	23.7%
Net profit	-30.0%	24.7%	41.7%	21.8%	23.2%
<b>Margins</b>					
GP	0.2%	0.4%	0.5%	0.5%	0.5%
OP	0.1%	0.2%	0.4%	0.4%	0.4%
NP	0.3%	0.7%	1.0%	1.0%	1.1%

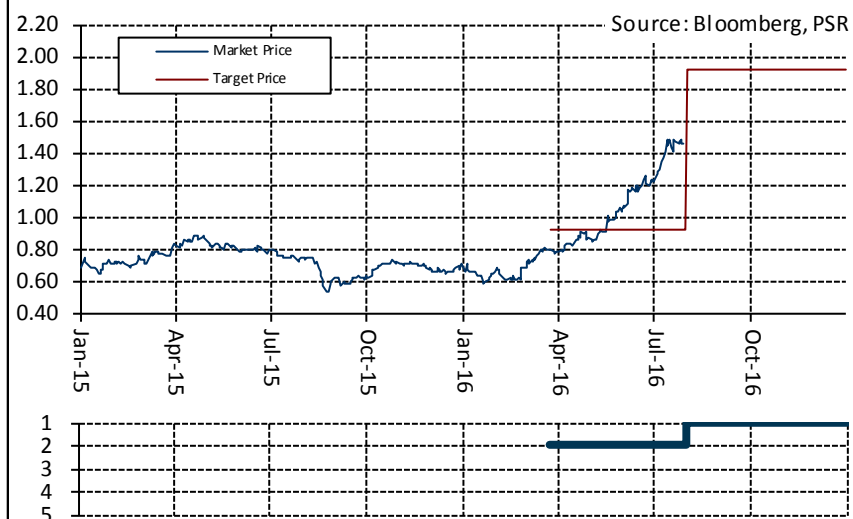
### Key Ratios

ROE (%)	8.9%	10.3%	12.9%	14.2%	15.7%
ROA (%)	3.6%	7.2%	8.1%	8.7%	8.9%
Net debt or (net cash)	(94)	(171)	(228)	(267)	(317)
Net gearing (x)	Net cash	Net cash	Net cash	Net cash	Net cash

Source: Company, Phillip Securities Research (Singapore) Estimates

\*Forward multiples & yields based on current market price; historical multiples & yields based on historical market price.

## Ratings History



## PSR Rating System

Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

## Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

**Contact Information (Singapore Research Team)****Research Operations Officer**Mohamed Amiruddin - [amiruddin@phillip.com.sg](mailto:amiruddin@phillip.com.sg)**Consumer | Healthcare**Soh Lin Sin - [sohls@phillip.com.sg](mailto:sohls@phillip.com.sg)**Transport | REITs (Industrial)**Richard Leow, CFTe, FRM -  
[richardleowwt@phillip.com.sg](mailto:richardleowwt@phillip.com.sg)**Banking and Finance**Jeremy Teong - [jeremyteongfh@phillip.com.sg](mailto:jeremyteongfh@phillip.com.sg)**Property | Infrastructure**Peter Ng - [peterngmc@phillip.com.sg](mailto:peterngmc@phillip.com.sg)**REITs (Commercial, Retail, Healthcare) | Property**Dehong Tan - [tandh@phillip.com.sg](mailto:tandh@phillip.com.sg)**US Equity**Ho Kang Wei - [hokw@phillip.com.sg](mailto:hokw@phillip.com.sg)**Macro**Pei Sai Teng - [peist@phillip.com.sg](mailto:peist@phillip.com.sg)**Technical Analysis**Jeremy Ng - [jeremyngch@phillip.com.sg](mailto:jeremyngch@phillip.com.sg)**Oil & Gas | Energy**Chen Guangzhi - [chengz@phillip.com.sg](mailto:chengz@phillip.com.sg)**Contact Information (Regional Member Companies)****SINGAPORE****Phillip Securities Pte Ltd**Raffles City Tower  
250, North Bridge Road #06-00  
Singapore 179101  
Tel +65 6533 6001  
Fax +65 6535 6631  
Website: [www.poems.com.sg](http://www.poems.com.sg)**JAPAN****Phillip Securities Japan, Ltd.**4-2 Nihonbashi Kabuto-cho Chuo-ku,  
Tokyo 103-0026  
Tel +81-3 3666 2101  
Fax +81-3 3666 6090  
Website: [www.phillip.co.jp](http://www.phillip.co.jp)**THAILAND****Phillip Securities (Thailand) Public Co. Ltd**15th Floor, Vorawat Building,  
849 Silom Road, Silom, Bangrak,  
Bangkok 10500 Thailand  
Tel +66-2 6351700 / 22680999  
Fax +66-2 22680921  
Website [www.phillip.co.th](http://www.phillip.co.th)**UNITED STATES****Phillip Futures Inc**141 W Jackson Blvd Ste 3050  
The Chicago Board of Trade Building  
Chicago, IL 60604 USA  
Tel +1-312 356 9000  
Fax +1-312 356 9005  
Website: [www.phillipusa.com](http://www.phillipusa.com)**INDIA****PhillipCapital (India) Private Limited**No.1, 18th Floor, Urmi Estate  
95, Ganpatrao Kadam Marg  
Lower Parel West, Mumbai 400-013  
Maharashtra, India  
Tel: +91-22-2300 2999 / Fax: +91-22-2300 2969  
Website: [www.phillipcapital.in](http://www.phillipcapital.in)**CAMBODIA****Phillip Bank Plc**Ground Floor of B-Office Centre, #61-64,  
Norodom Blvd Corner Street 306, Sangkat  
Boeung Keng Kang 1, Khan Chamkamorn,  
Phnom Penh, Cambodia  
Tel: 855 (0) 7796 6151/855 (0) 1620 0769  
Website: [www.phillipbank.com.kh](http://www.phillipbank.com.kh)**MALAYSIA****Phillip Capital Management Sdn Bhd**B-3-6 Block B Level 3 Megan Avenue II,  
No. 12, Jalan Yap Kwan Seng, 50450  
Kuala Lumpur  
Tel +603 2162 8841  
Fax +603 2166 5099  
Website: [www.poems.com.my](http://www.poems.com.my)**INDONESIA****PT Phillip Securities Indonesia**ANZ Tower Level 23B,  
JI Jend Sudirman Kav 33A  
Jakarta 10220 – Indonesia  
Tel +62-21 5790 0800  
Fax +62-21 5790 0809  
Website: [www.phillip.co.id](http://www.phillip.co.id)**FRANCE****King & Shaxson Capital Limited**3rd Floor, 35 Rue de la Bienfaisance 75008  
Paris France  
Tel +33-1 45633100  
Fax +33-1 45636017  
Website: [www.kingandshaxson.com](http://www.kingandshaxson.com)**AUSTRALIA****Phillip Capital Limited**Level 12, 15 William Street,  
Melbourne, Victoria 3000, Australia  
Tel +61-03 9629 8288  
Fax +61-03 9629 8882  
Website: [www.phillipcapital.com.au](http://www.phillipcapital.com.au)**TURKEY****PhillipCapital Menkul Degerler**Dr. Cemil Bengü Cad. Hak Is Merkezi  
No. 2 Kat. 6A Caglayan  
34403 Istanbul, Turkey  
Tel: 0212 296 84 84  
Fax: 0212 233 69 29  
Website: [www.phillipcapital.com.tr](http://www.phillipcapital.com.tr)**HONG KONG****Phillip Securities (HK) Ltd**11/F United Centre 95 Queensway  
Hong Kong  
Tel +852 2277 6600  
Fax +852 2868 5307  
Websites: [www.phillip.com.hk](http://www.phillip.com.hk)**CHINA****Phillip Financial Advisory (Shanghai) Co Ltd**No 550 Yan An East Road,  
Ocean Tower Unit 2318,  
Postal code 200001  
Tel +86-21 5169 9200  
Fax +86-21 6351 2940  
Website: [www.phillip.com.cn](http://www.phillip.com.cn)**UNITED KINGDOM****King & Shaxson Capital Limited**6th Floor, Candlewick House,  
120 Cannon Street,  
London, EC4N 6AS  
Tel +44-20 7426 5950  
Fax +44-20 7626 1757  
Website: [www.kingandshaxson.com](http://www.kingandshaxson.com)**SRI LANKA****Asha Phillip Securities Limited**2<sup>nd</sup> Floor, Lakshmans Building,  
No. 321, Galle Road,  
Colombo 03, Sri Lanka  
Tel: (94) 11 2429 100  
Fax: (94) 11 2429 199  
Website: [www.ashaphillip.net](http://www.ashaphillip.net)**DUBAI****Phillip Futures DMCC**Member of the Dubai Gold and  
Commodities Exchange (DGEX)  
Unit No 601, Plot No 58, White Crown Bldg,  
Sheikh Zayed Road, P.O.Box 212291  
Dubai-UAE  
Tel: +971-4-3325052 / Fax: + 971-4-3328895

### Important Information

This report is prepared and/or distributed by Phillip Securities Research Pte Ltd ("Phillip Securities Research"), which is a holder of a financial adviser's license under the Financial Advisers Act, Chapter 110 in Singapore.

By receiving or reading this report, you agree to be bound by the terms and limitations set out below. Any failure to comply with these terms and limitations may constitute a violation of law. This report has been provided to you for personal use only and shall not be reproduced, distributed or published by you in whole or in part, for any purpose. If you have received this report by mistake, please delete or destroy it, and notify the sender immediately.

The information and any analysis, forecasts, projections, expectations and opinions (collectively, the "Research") contained in this report has been obtained from public sources which Phillip Securities Research believes to be reliable. However, Phillip Securities Research does not make any representation or warranty, express or implied that such information or Research is accurate, complete or appropriate or should be relied upon as such. Any such information or Research contained in this report is subject to change, and Phillip Securities Research shall not have any responsibility to maintain or update the information or Research made available or to supply any corrections, updates or releases in connection therewith.

Any opinions, forecasts, assumptions, estimates, valuations and prices contained in this report are as of the date indicated and are subject to change at any time without prior notice. Past performance of any product referred to in this report is not indicative of future results.

This report does not constitute, and should not be used as a substitute for, tax, legal or investment advice. This report should not be relied upon exclusively or as authoritative, without further being subject to the recipient's own independent verification and exercise of judgment. The fact that this report has been made available constitutes neither a recommendation to enter into a particular transaction, nor a representation that any product described in this report is suitable or appropriate for the recipient. Recipients should be aware that many of the products, which may be described in this report involve significant risks and may not be suitable for all investors, and that any decision to enter into transactions involving such products should not be made, unless all such risks are understood and an independent determination has been made that such transactions would be appropriate. Any discussion of the risks contained herein with respect to any product should not be considered to be a disclosure of all risks or a complete discussion of such risks.

Nothing in this report shall be construed to be an offer or solicitation for the purchase or sale of any product. Any decision to purchase any product mentioned in this report should take into account existing public information, including any registered prospectus in respect of such product.

Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may provide an array of financial services to a large number of corporations in Singapore and worldwide, including but not limited to commercial / investment banking activities (including sponsorship, financial advisory or underwriting activities), brokerage or securities trading activities. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have participated in or invested in transactions with the issuer(s) of the securities mentioned in this report, and may have performed services for or solicited business from such issuers. Additionally, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may have provided advice or investment services to such companies and investments or related investments, as may be mentioned in this report.

Phillip Securities Research or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report may, from time to time maintain a long or short position in securities referred to herein, or in related futures or options, purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation in respect of the foregoing. Investments will be denominated in various currencies including US dollars and Euro and thus will be subject to any fluctuation in exchange rates between US dollars and Euro or foreign currencies and the currency of your own jurisdiction. Such fluctuations may have an adverse effect on the value, price or income return of the investment.

To the extent permitted by law, Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may at any time engage in any of the above activities as set out above or otherwise hold an interest, whether material or not, in respect of companies and investments or related investments, which may be mentioned in this report. Accordingly, information may be available to Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, which is not reflected in this report, and Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited to its officers, directors, employees or persons involved in the issuance of this report, may, to the extent permitted by law, have acted upon or used the information prior to or immediately following its publication. Phillip Securities Research, or persons associated with or connected to Phillip Securities Research, including but not limited its officers, directors, employees or persons involved in the issuance of this report, may have issued other material that is inconsistent with, or reach different conclusions from, the contents of this report.

The information, tools and material presented herein are not directed, intended for distribution to or use by, any person or entity in any jurisdiction or country where such distribution, publication, availability or use would be contrary to the applicable law or regulation or which would subject Phillip Securities Research to any registration or licensing or other requirement, or penalty for contravention of such requirements within such jurisdiction.

This report is intended for general circulation only and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. The products mentioned in this report may not be suitable for all investors and a person receiving or reading this report should seek advice from a professional and financial adviser regarding the legal, business, financial, tax and other aspects including the suitability of such products, taking into account the specific investment objectives, financial situation or particular needs of that person, before making a commitment to invest in any of such products.

This report is not intended for distribution, publication to or use by any person in any jurisdiction outside of Singapore or any other jurisdiction as Phillip Securities Research may determine in its absolute discretion.

### IMPORTANT DISCLOSURES FOR INCLUDED RESEARCH ANALYSES OR REPORTS OF FOREIGN RESEARCH HOUSES

Where the report contains research analyses or reports from a foreign research house, please note:

- (i) recipients of the analyses or reports are to contact Phillip Securities Research (and not the relevant foreign research house) in Singapore at 250 North Bridge Road, #06-00 Raffles City Tower, Singapore 179101, telephone number +65 6533 6001, in respect of any matters arising from, or in connection with, the analyses or reports; and
- (ii) to the extent that the analyses or reports are delivered to and intended to be received by any person in Singapore who is not an accredited investor, expert investor or institutional investor, Phillip Securities Research accepts legal responsibility for the contents of the analyses or reports.