

Xinyi Solar (968 HK)

FY19 earnings in line; new capacity delay by 1Q

XYs delivered FY19 earnings of HK\$2,416mn, in line with ours and consensus estimates. Market is clearly more concerned about impacts to solar glass sales from coronavirus outbreak in the overseas areas. Mgmt. revealed that PV glass pricing faced no pressures yet, as industry has average inventory at only 20 days, still in a normal range. To factor in potential demand shock due to COVID-19, we trim FY20E solar glass ASP/sales volume by 5.4%/3.6%. Though we cut FY20E earnings by 12.4% to HK\$2,992mn, we think XYs' earnings growth outlook remains intact. **Our DCF TP is cut 4.6% to HK\$6.31. Maintain BUY.**

- **FY19 earnings surged 29.1% YoY.** Strong earnings was boosted by 1) PV glass volume increased by 27.1% YoY, and 2) we estimate PV glass ASP increased 4.9% to RMB26.7/sqm. Other than good sales figures, XYs also had expenses in good control as admin costs and selling and distribution costs both read significant YoY decline (see Figure 1). Net profit was HK\$2.416mn with an EPS of HK\$30.3 cents. XYs declared final dividend of HK\$8.5 cents (FY19 totaled HK\$14 cents), representing 46.2% payout ratio and 3.0% yield.
- **Delay new capacity launching schedule.** Given construction delay and potential demand uncertainties, mgmt. decided to delay launching new capacity by one quarter, and expected the first production line to commence in June. As such, effective melting capacity growth is trimmed from 37.3% to 26.1%. However, as XYs has thinner 2.0mm bifacial PV glass shipment, we believe sales growth measure in area will mitigate melting capacity loss. We estimate overall sales area will decline by only 3.6% vs. our previous estimates.
- **Reduce ASP outlook for potential demand impacts.** As COVID-19 turned severe in Europe and US, we expect XYs may suffer demand disruption due to overseas virus control measures. We cut FY20E ASP assumption by 5.4% from RMB28.0/sq m to RMB26.5/sq m to factor in potential weak demand. We are not too concerned about XYs' profitability, since the Company may be compensated by better-than-expected cost structure from lower gas and soda ash prices.
- **Long-term profitability remains intact.** In view of demand uncertainties leading to weaker ASP outlook, we cut our FY20E earnings by 12.4% to HK\$2,992mn. Our revised earnings reflects 22.3% YoY growth. Based on XYs' solid fundamentals, we believe the Company's long-term profitability remains intact. Our DCF TP is trimmed from HK\$6.62 to HK\$6.31. Maintain BUY.
- **Key risks:** PV glass price risks; long term lasting of COVID-19 control.

Earnings Summary

(YE 31 Dec)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue (HK\$ mn)	7,672	9,096	10,864	15,407	18,738
Net income (HK\$ mn)	1,863	2,416	2,992	4,487	5,383
EPS (HK\$)	0.25	0.30	0.37	0.56	0.67
YoY growth (%)	(24)	21.8	22.3	49.9	20.0
Consensus EPS (HK\$)	N/A	N/A	0.40	0.49	0.49
P/E (x)	19.0	15.6	12.7	8.5	7.1
P/B (x)	3.5	2.7	2.4	2.1	1.8
Yield (%)	2.6	3.0	3.8	5.6	6.8
ROE (%)	18.3	17.3	19.0	24.3	25.1
Net gearing (%)	76.5	31.5	26.4	17.1	8.1

Source: Company data, Bloomberg, CMBIS estimate

BUY (Maintain)

Target Price	HK\$6.31
(Previous TP	HK\$6.62)
Up/Downside	+33.7%
Current Price	HK\$4.72

China Solar Sector

Robin Xiao

(852) 3900 0849

robinxiao@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	38,147
Avg 3 mths t/o (HK\$ mn)	150.3
52w High/Low (HK\$)	7.04/3.57
Total Issued Shares (mn)	8,082

Source: Bloomberg

Shareholding Structure

Xinyi Group Glass Co Ltd	24.4%
Yin Yee Lee	32.1%
Free float	43.5%

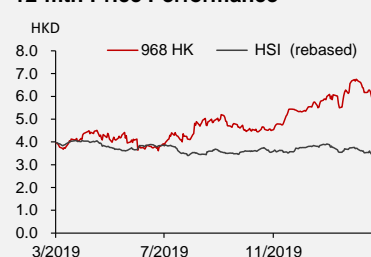
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-29.3%	-14.8%
3-mth	-11.4%	5.6%
6-mth	-6.3%	10.1%
12-mth	28.6%	61.8%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: PwC

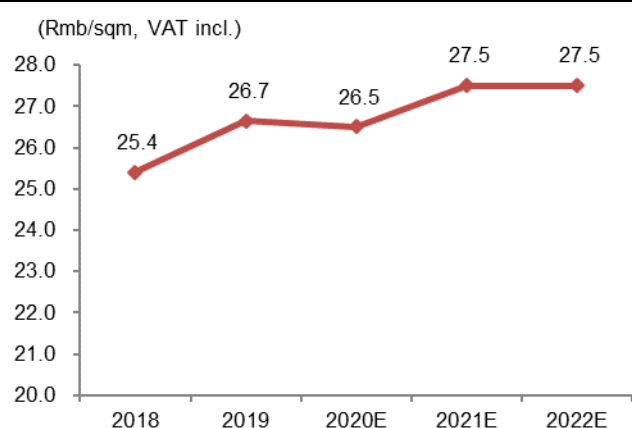
Related Reports

1. "China Solar Sector - Brace for a potential demand shock" – 13 Mar 2020
2. "Xinyi Solar (968 HK) - Thrilling demand driving up solar glass price" – 8 Jan 2020
3. "Xinyi Solar (968 HK) - NDR takeaway: bullish demand outlook" – 15 Aug 2019

Figure 1: earnings summary

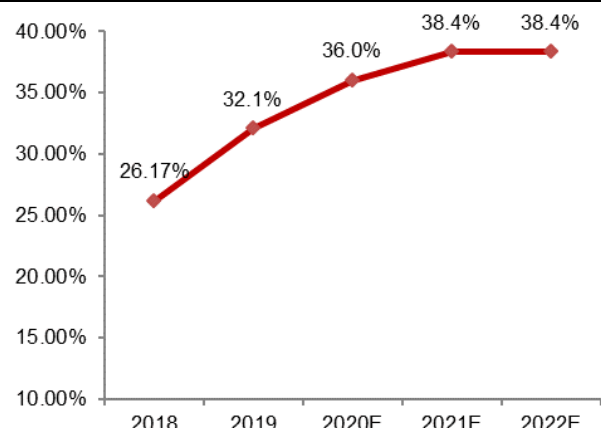
(HKD mn)	2018	2019	yoy Change(%)	2019E	Actual vs. ours Diff (%)	CMBIS Comments
Revenue	7,672	9,096	18.6%	9,492	-4.2%	
Solar glass segment	5,562	6,767	21.7%	7,079	-4.4%	Shipment volume lower than our est.
Solar power generation	1,920	2,228	16.0%	2,243	-0.7%	In line, as with more PV farm capacity
EPC services	189	101	-46.5%	170	-40.5%	
Cost of sales	(4,711)	(5,185)	10.0%	(5,313)	-2.4%	Maintained good control in PV glass costs
Gross profit	2,960	3,912	32.1%	4,180	-6.4%	
Gross profit margin	38.6%	43.0%	4.4ppt	44.0%	-1.0ppt	GPM expanded due to solar glass
Other Income	176	131	-26.0%	155	-15.7%	
Other gain/(losses),net	(8)	(5)	n/a	(5)	8.7%	
Selling and distribution exps	(271)	(282)	3.8%	(326)	-13.6%	Mainly due to transportation costs decline
Admin exps	(413)	(427)	3.5%	(474)	-9.9%	Maintained good costs control
Exceptional	(2)	(14)	n/a	-	n/a	
Operating profit - EBIT	2,443	3,314	35.6%	3,530	-6.1%	In line and performed better
Bargain purchase	6	-	n/a	-	n/a	
Finance income	10	49	413.1%	25	95.7%	XYs increased cash level from share placement
Finance costs	(256)	(304)	18.6%	(276)	10.1%	We est. borrowing costs at 3.9% in FY19
Share profit	43	33	-22.9%	43	-22.9%	
Exceptional	-	-	n/a	-	n/a	
Profit before income tax	2,246	3,093	37.7%	3,323	-6.9%	
Income tax expenses	(205)	(294)	43.7%	(349)	-15.7%	
Profit after tax	2,042	2,799	37.1%	2,974	-5.9%	
Effective tax rate	9.1%	9.5%	-0.4ppt	10.5%	-1.0ppt	
Minority interest	179	382	114.0%	474	-19.4%	
Net Income	1,863	2,417	29.7%	2,500	-3.3%	Net income was in line with our est.
Net profit margin	24.3%	26.6%	-0.2ppt	26.3%	0.2ppt	
EPS (HK\$, cent)	24.9	30.3	21.8%	31.39	-3.5%	

Source: Company Data, CMBIS estimates

Figure 2: Solar glass ASP

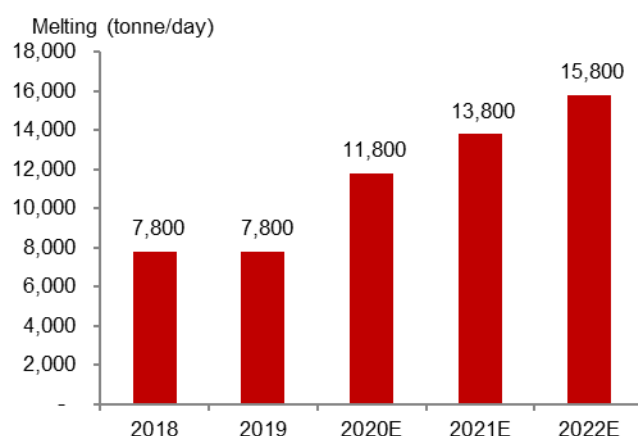
Source: CMBIS estimates

Note: 2018/19 ASP is estimated based on sales over shipment projection

Figure 3: Solar glass GPM

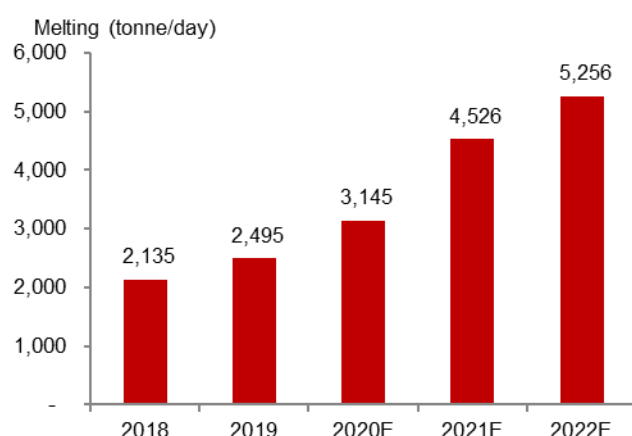
Source: Company data, CMBIS estimates

Figure 4: Solar glass melting capacity



Source: Company data, CMBIS estimates

Figure 5: Effective melting output guidance



Source: Company data, CMBIS estimates

Figure 5: Our earnings sensitivity to ASP change – each RMB0.5/sqm change will lead to ~4% earnings variance in our FY20/21E earnings

Unit price	2020E	diff	2021E	diff
26.0	2,851	-4.7%	3,878	-5.0%
26.5	2,992	0.0%	4,081	-4.7%
27.0	3,133	4.7%	4,284	-4.5%
27.5	3,274	4.5%	4,487	0%
28.0	3,415	4.3%	4,690	4.5%
28.5	3,556	4.1%	4,893	4.3%
29.0	3,698	4.0%	5,096	4.1%
29.5	3,839	3.8%	5,299	4.0%
30.0	3,980	3.7%	5,502	3.8%

Source: CMBIS estimates

Figure 6: Earnings revision

	Old		New		Change	
	2020	2021	2020	2021	2020	2021
PV processed glass ASP (RMB/sqm)	28.0	27.5	26.5	27.5	-5.4%	0.0%
PV glass sales volume (mn sqm)	343	475	331	477	-3.6%	0.4%
Revenue (HK\$, mn)	12,054	16,024	10,864	15,407	-9.9%	-3.9%
Net income(HK\$, mn)	3,417	4,569	2,992	4,487	-12.4%	-1.8%
EPS(HK\$)	0.42	0.57	0.37	0.56	-12.4%	-1.8%
Consensus earnings (HK\$, mn)			3,160	3,895		
Our est. vs. consensus (%)			-5.3%	15.2%		

Source: CMBIS estimates

Figure 7: Our DCF valuation

DCF Valuation	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Turnover (HK\$ mn)	15,407	18,738	22,103	24,206	26,242	27,564	27,368	27,201	27,064	26,959
Solar glass	12,865	15,956	18,869	20,746	22,541	23,607	23,134	22,672	22,218	21,774
Solar Farm	2,371	2,560	2,990	3,191	3,405	3,633	3,876	4,136	4,413	4,708
EPC	171	222	244	269	296	325	358	394	433	476
Turnover growth	41.8%	21.6%	18.0%	9.5%	8.4%	5.0%	-0.7%	-0.6%	-0.5%	-0.4%
EBIT (HK\$ mn)	4,949	6,091	7,366	8,046	8,709	9,161	9,162	9,175	9,201	9,241
EBIT margin(%)	32.1%	32.5%	33.3%	33.2%	33.2%	33.2%	33.5%	33.7%	34.0%	34.3%
Tax rate (%)	14.8%	15.3%	15.5%	15.7%	15.8%	15.8%	15.8%	15.9%	15.9%	16.0%
Depreciation -Rmb mn	1,217	1,082	1,242	1,352	1,464	1,515	1,570	1,628	1,690	1,757
Change in working capital	(2,271)	(1,666)	(1,178)	(736)	(407)	(212)	31	27	22	17
CAPEX (HKD mn)	(3,376)	(2,088)	(2,188)	(2,296)	(2,446)	(2,611)	(2,792)	(2,991)	(3,210)	(3,451)
Free cash flow	(216)	2,487	4,098	5,101	5,948	6,410	6,522	6,382	6,237	6,086
Years	1	2	3	4	5	6	7	8	9	10
Discount factor	0.92	0.85	0.78	0.72	0.66	0.60	0.56	0.51	0.47	0.43
Discount free cash flow	(198)	2,103	3,187	3,648	3,911	3,876	3,627	3,264	2,933	2,632
Terminal value	92,044									
Terminal EV/EBITDA	8.37									
Discounted terminal value	39,806									
Terminal perpetual growth	2%									

WACC Calculations	
Cost of debt	4.0%
Tax rate	15.0%
After tax cost of debt	3.4%
Cost of equity	12.3%
Adjusted beta	1.10
Market risk premium	9.6%
Risk free rate	1.8%
% of debt financing	40.0%
WACC	8.7%

Valuations (HK\$ mn)	
Discounted Terminal Value	39,806
Terminal perpetual growth(%)	2.0%
Terminal EV/EBITDA	8.37
Total discount FCF	20,153
Enterprise Value	59,959
Discount FCF(% of total)	33.6%
Terminal value (% of total)	66.4%
Add: Cash & cash equivalent	3,524
Less: Total debt	(7,677)
Non-controlling interest	(4,798)
Equity Value (HKD mn)	51,008
Fair value per share(HK\$)	6.31

Source: CMBIS estimates

Financial Summary

Income statement

YE 31 Dec (HK\$ mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	7,672	9,096	10,864	15,407	18,738
Solar glass sales	5,562	6,767	8,613	12,865	15,956
Solar power generation	1,920	2,228	2,120	2,371	2,560
EPC services	189	101	131	171	222
Cost of sales	(4,711)	(5,185)	(6,215)	(8,738)	(10,762)
Gross profit	2,960	3,912	4,649	6,669	7,976
Other Income	176	131	139	139	139
Other gain/(losses),net	(8)	(5)	(5)	(5)	(5)
Selling & marketing exps	(271)	(282)	(383)	(539)	(663)
Admin and other exps	(413)	(427)	(478)	(638)	(755)
EBIT	2,443	3,314	3,922	5,626	6,692
Financial income	10	49	24	38	54
Financial cost	(256)	(304)	(188)	(213)	(271)
Exceptional	-	-	-	-	-
Pre-tax profit	2,246	3,093	3,792	5,484	6,509
Income tax	(205)	(294)	(398)	(576)	(683)
Minority interests	(179)	(382)	(401)	(421)	(442)
Net profit	1,863	2,416	2,992	4,487	5,383

Cash flow summary

YE 31 Dec (HK\$ mn)	FY18A	FY19A	FY20E	FY21E	FY22E
EBIT	2,443	3,314	3,922	5,626	6,692
Depreciation and amortization	707	807	979	1,217	1,384
Change in working capital	(255)	(1,818)	695	(27)	(124)
Taxation	(237)	(245)	(383)	(570)	(677)
Others	(348)	161	(477)	(496)	(552)
Net cash from operating	2,310	2,218	4,736	5,750	6,722
Capex	(2,248)	(2,642)	(3,087)	(2,955)	(2,940)
Joint ventures investments	17	(12)	(349)	(421)	(442)
Others	-	-	-	-	-
Net cash from investment	(2,230)	(2,655)	(3,436)	(3,376)	(3,383)
Equity raised	(456)	2,087	-	-	-
Change of Debts	837	(2,086)	994	880	584
Dividend paid	(1,095)	(761)	(1,397)	(1,795)	(2,369)
Others	(65)	2,771	401	421	442
Net cash from financing	(778)	2,011	(2)	(493)	(1,342)
Net change in cash	(698)	1,574	1,299	1,881	1,997
Cash at the beginning	1,381	784	2,221	3,520	5,400
Exchange difference	102	(137)	-	-	-
Cash at the end of the year	784	2,221	3,520	5,400	7,397

Balance sheet

YE 31 Dec (HK\$ mn)	FY18A	FY19A	FY20E	FY21E	FY22E
Non-current assets	17,089	18,930	21,307	23,437	25,435
Fixed assets	15,804	16,711	19,722	21,447	22,992
Land use rights	320	1,249	346	358	370
Inv. in JV and Associate	433	404	798	1,219	1,662
Others	532	566	441	413	411
Current assets	6,803	9,467	11,428	15,083	18,466
Cash	784	2,221	3,520	5,400	7,397
Account receivable	4,154	5,437	5,293	6,527	7,457
Inventory	430	410	646	965	1,197
Amount due from	4	6	-	-	-
Others	1,432	1,394	1,969	2,191	2,415
Current liabilities	6,737	5,249	6,801	8,878	10,377
Trade and other payable	2,780	2,220	3,498	5,214	6,471
Amount due	102	91	92	93	93
Current income tax liabilities	48	102	107	113	118
Borrowings	3,773	2,804	3,071	3,423	3,657
Others	34	32	33	35	37
Non-current liabilities	5,096	3,948	4,676	5,206	5,557
Borrowings	4,997	3,880	4,606	5,134	5,485
Other payables	89	57	58	58	59
Deferred tax liabilities	11	12	12	13	13
Total net assets	12,059	19,200	21,257	24,437	27,967
Minority Interest	1,625	4,396	4,798	5,219	5,661
Shareholders' equity	10,434	14,177	15,773	18,464	21,479

Key ratios

YE 31 Dec	FY18A	FY19A	FY20E	FY21E	FY22E
Sales mix (%)					
Solar glass sales	72.5	74.4	79.3	83.5	85.2
Solar power generation	25.0	24.5	19.5	15.4	13.7
EPC services	2.5	1.1	1.2	1.1	1.2
Total	100.0	100.0	100.0	100.0	100.0
Profit & loss ratios (%)					
Gross margin	38.6	43.0	42.8	43.3	42.6
Pre-tax margin	29.3	34.0	34.9	35.6	34.7
Net margin	24.3	26.6	27.5	29.1	28.7
Effective tax rate	9.1	9.5	10.5	10.5	10.5
Balance sheet ratios					
Current ratio (x)	1.0	1.8	1.7	1.7	1.8
Quick ratio (x)	0.9	1.7	1.6	1.6	1.7
Cash ratio (x)	0.1	0.4	0.5	0.6	0.7
Debtors turnover days	197.9	192.4	180.2	140.0	136.2
Inventory turnover days	31.1	29.6	31.0	33.6	36.7
Creditors turnover days	221.6	176.0	167.9	182.0	198.2
Total debt / equity ratio (%)	72.7	36.0	37.3	36.1	33.7
Net debt / equity ratio (%)	76.5	31.5	26.4	17.1	8.1
Returns (%)					
ROE	17.9	17.0	19.0	24.3	25.1
ROA	7.8	8.5	9.1	11.6	12.3
Per share					
EPS (HK\$)	0.25	0.30	0.37	0.56	0.67
DPS (HK\$)	0.12	0.14	0.18	0.27	0.32
BVPS (HK\$)	1.36	1.75	1.95	2.28	2.66

Source: Company data, CMBIS estimates

Disclosures & Disclaimers

Analyst Certification

The research analyst who is primary responsible for the content of this research report, in whole or in part, certifies that with respect to the securities or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about the subject securities or issuer; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific views expressed by that analyst in this report.

Besides, the analyst confirms that neither the analyst nor his/her associates (as defined in the code of conduct issued by The Hong Kong Securities and Futures Commission) (1) have dealt in or traded in the stock(s) covered in this research report within 30 calendar days prior to the date of issue of this report; (2) will deal in or trade in the stock(s) covered in this research report 3 business days after the date of issue of this report; (3) serve as an officer of any of the Hong Kong listed companies covered in this report; and (4) have any financial interests in the Hong Kong listed companies covered in this report.

CMBIS Ratings

BUY	: Stock with potential return of over 15% over next 12 months
HOLD	: Stock with potential return of +15% to -10% over next 12 months
SELL	: Stock with potential loss of over 10% over next 12 months
NOT RATED	: Stock is not rated by CMBIS

OUTPERFORM	: Industry expected to outperform the relevant broad market benchmark over next 12 months
MARKET-PERFORM	: Industry expected to perform in-line with the relevant broad market benchmark over next 12 months
UNDERPERFORM	: Industry expected to underperform the relevant broad market benchmark over next 12 months

CMB International Securities Limited

Address: 45/F, Champion Tower, 3 Garden Road, Hong Kong, Tel: (852) 3900 0888 Fax: (852) 3900 0800

CMB International Securities Limited ("CMBIS") is a wholly owned subsidiary of CMB International Capital Corporation Limited (a wholly owned subsidiary of China Merchants Bank)

Important Disclosures

There are risks involved in transacting in any securities. The information contained in this report may not be suitable for the purposes of all investors. CMBIS does not provide individually tailored investment advice. This report has been prepared without regard to the individual investment objectives, financial position or special requirements. Past performance has no indication of future performance, and actual events may differ materially from that which is contained in the report. The value of, and returns from, any investments are uncertain and are not guaranteed and may fluctuate as a result of their dependence on the performance of underlying assets or other variable market factors. CMBIS recommends that investors should independently evaluate particular investments and strategies, and encourages investors to consult with a professional financial advisor in order to make their own investment decisions.

This report or any information contained herein, have been prepared by the CMBIS, solely for the purpose of supplying information to the clients of CMBIS or its affiliate(s) to whom it is distributed. This report is not and should not be construed as an offer or solicitation to buy or sell any security or any interest in securities or enter into any transaction. Neither CMBIS nor any of its affiliates, shareholders, agents, consultants, directors, officers or employees shall be liable for any loss, damage or expense whatsoever, whether direct or consequential, incurred in relying on the information contained in this report. Anyone making use of the information contained in this report does so entirely at their own risk.

The information and contents contained in this report are based on the analyses and interpretations of information believed to be publicly available and reliable. CMBIS has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIS provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIS may issue other publications having information and/or conclusions different from this report. These publications reflect different assumption, point-of-view and analytical methods when compiling. CMBIS may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIS may have a position, make markets or act as principal or engage in transactions in securities of companies referred to in this report for itself and/or on behalf of its clients from time to time. Investors should assume that CMBIS does or seeks to have investment banking or other business relationships with the companies in this report. As a result, recipients should be aware that CMBIS may have a conflict of interest that could affect the objectivity of this report and CMBIS will not assume any responsibility in respect thereof. This report is for the use of intended recipients only and this publication, may not be reproduced, reprinted, sold, redistributed or published in whole or in part for any purpose without prior written consent of CMBIS.

Additional information on recommended securities is available upon request.

For recipients of this document in the United Kingdom

This report has been provided only to persons (I) falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended from time to time) ("The Order") or (II) are persons falling within Article 49(2) (a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.") of the Order, and may not be provided to any other person without the prior written consent of CMBIS.

For recipients of this document in the United States

This report is intended for distribution in the United States to "major US institutional investors", as defined in Rule 15a-6 under the US, Securities Exchange Act of 1934, and may not be furnished to any other person in the United States. Each major US institutional investor that receives a copy of this research report by its acceptance hereof represents and agrees that it shall not distribute or provide this research report to any other person.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBISG) (Company Regn. No. 201731928D), an Exempt Financial Adviser as defined in the Financial Advisers Act (Cap. 110) of Singapore and regulated by the Monetary Authority of Singapore. CMBISG may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, as defined in the Securities and Futures Act (Cap. 289) of Singapore, CMBISG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBISG at +65 6350 4400 for matters arising from, or in connection with the report.