

3 October 2018

Consumer Discretionary | Leisure Products

## Qian Hu Corporation

**Non-Rated**

### Expedition Series: Swimming With Fishes

Target Price: N/A  
 Price: SGD0.24  
 Market Cap: USD19.8m  
 Bloomberg Ticker: QIAN SP

**We visited Qian Hu's new aquaculture business in Hainan, China in late August. Currently, its main revenue from aquaculture comes from rearing grouper fry and selling them at a healthy profit margin weeks later. It has an export licence in China, and is the only one in Hainan to obtain one. It currently importing marble goby, snapper and will look at expanding the range of fish to include varieties like pompano, etc. We estimate this business will need about six months to a year to scale up, and could be a potentially exciting new growth driver for the company. The last closing price of this unrated stock is SGD0.24.**

#### Share Data

Avg Daily Turnover (SGD/USD) 0.035m/0.025m  
 52-wk Price low/high (SGD) 0.25 - 0.15  
 Free Float (%) 55.8  
 Shares outstanding (m) 114  
 Estimated Return N/A

#### Shareholders (%)

Qian Hu Holdings 24.0  
 Mr Yap Ah Seng 3.5  
 Mr Yap Ah Siong 3.5

#### Share Performance (%)

	YTD	1m	3m	6m	12m
Absolute	20.0	20.0	20.0	26.3	60.0
Relative	24.9	19.3	20.1	32.0	60.8

Source: Bloomberg

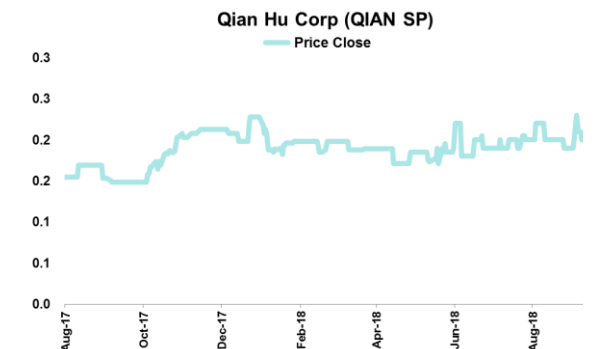
**Venturing into aquaculture.** Qian Hu's management has always wanted a new growth driver that complements its technological and food nutrition expertise. It finally found one in 2017, and ventured into aquaculture. It entered into a JV with a partner, Ms Zhang Mei Yu, that developed herb-based medication to improve the survival rate of the fishes. This, coupled with its strong ties to China, enabled Qian Hu to venture into Hainan, China where it established new fish farms. Qian Hu holds a 51% stake in the JV, and management has not ruled out the possibility of owning it entirely in the near future.

**On the verge of a breakthrough.** It is currently focused on rearing and selling grouper fingerlings. Fingerlings are reared for 2-4 weeks, during which they can grow 2-5cm. Currently, the average survival rate is 60-70%, but the company is working to boost it to 80% before ramping up production. The cost per fingerling is estimated at CNY1-2, and they are sold at about CNY4 – implying a rate of CNY0.5-0.6 per cm. Currently, it is selling an average of 100,000-200,000 fingerlings a month, and can ramp this up to 400,000-500,000, if needed.

**Export license up to 2022.** Qian Hu has one of the few fish farms in China that has managed to secure an export licence (valid up to 2022). Currently, it mainly exports grouper and snapper fry, as well as marble goby to China, Singapore and Malaysia. Management is also looking to export more types of fishes, like pompano, going forward

**Exploring other types of aquaculture.** Qian Hu is also exploring and experimenting with other types of aquaculture farming, like lobster farming and a shrimp hatchery. During our visit, we noted there was a large number of snail farms in the vicinity, and management is exploring lobster farming as a viable option – since it offers a much higher ROI compared to snail farming. If successful, the company could then supply local farmers with lobster fry and work with them to rear lobsters, instead of snails.

**A comeback in FY19?** With the ornamental business providing steady cash flow that should enable it to ramp up and strengthen its aquaculture business, Qian Hu could be making a comeback in terms of profitability in FY19. However, note that management will need about 6-9 months to conduct more research and development, and improve the survival rates of its grouper fry.



Source: Bloomberg

Forecasts and Valuations	Dec-15	Dec-16	Dec-17
Total turnover (SGDm)	78.0	80.5	87.8
Reported net profit (SGDm)	0.3	0.3	0.5
Recurring net profit (SGDm)	0.3	0.3	0.5
Recurring net profit growth (%)	7.7	7.7	(11.5)
Recurring EPS (SGD)	0.02	0.06	0.29
DPS (SGD)	0.20	0.00	0.20
Recurring P/E (x)	825	150	69
P/B (x)	0.4	0.2	0.5
P/CF (x)	15.1	3.7	3.6
Dividend Yield (%)	2.5	2.3	1.2
EV/EBITDA (x)	11.0	8.9	9.5
Return on average equity (%)	0.0	0.0	0.6
Net debt to equity (%)	14.0	14.1	10.6
Our vs consensus EPS (adjusted) (%)			

Source: Bloomberg, Company data

#### Analysts

**Jarick Seet**  
 +65 6232 3891  
[jarick.seet@rhbgroup.com](mailto:jarick.seet@rhbgroup.com)



**Lee Cai Ling**  
 +65 6232 3892  
[lee.cai.ling@rhbgroup.com](mailto:lee.cai.ling@rhbgroup.com)



**Visit to aquaculture farms on 28-30 Aug.** A few weeks ago, we visited Qian Hu's aquaculture fish farms in Wenchang, Hainan. The province of Hainan is China's aquaculture hub today, and there are approximately 2,000-3,000 farms alone in the area where Qian Hu is operating. It currently occupies two farms – Qian Hu Farm and Tian Tian Fishery.

Construction on Qian Hu Farm began in Dec 2016, and the facility was completed and opened in Jun 2017. The land is leased from the provincial government for 20 years. It stands on 6,000 sqm of land, and contains 102 tanks. Out of these, approximately 70% are allocated to grow grouper fingerlings – and the remainder is for its export arm.

Meanwhile, Tian Tian Fishery is on a 2-year lease from an existing farmer. This fishery is a part of Qian Hu's import business, and contains a shrimp hatchery and lobster farming area. It occupies an area of 4,000 sqm, ie smaller than Qian Hu Farm.

**A close-knit, family business.** The aquaculture business is headed by Mr Yap Kok Cheng, the nephew of Mr Kenny Yap, Qian Hu's executive chairman and CEO. Kok Cheng has been with the company since 2005 and was working for its ornamental fish distribution business in China prior to helming this division. Assisting him are another two Yap family members, Mr Yap Kok Fong (Kok Cheng's brother) and Mr Lim Yik Kiang (Kok Cheng's brother-in-law).

**Not your average filtration system.** The farms' Hydro-Pure technology filtration system has two functions. The ionisation of water results in clear water for the farm, while electrolysis aids in disinfecting the water. As such, better quality of water promotes the survival rate of the fishes.

**Figure 1: Pilot aquaculture farm in Wenchang, Hainan Province, China**



Source: RHB

**Figure 2: Outdoor fish tanks**



Source: RHB

**Figure 3: Sedimentation pond**



Source: RHB

**Figure 4: Indoor fish tanks**



Source: RHB

Figure 5: Treated seawater reservoir



Source: RHB

Figure 6: Intensive multi-tier automated recirculation holding tank system



Source: RHB

Figure 7: Daily recording of coral trout DOA

池号		DOA记录表		批次		鱼名		规格		备注	
日期	气温	水温	上午	下午	合计	操作	用药	数量	规格	数量	备注
8.19	27	29	2	2	4	换	药				
8.20	27	29	2	2	4	换	药				
8.21	27	29	1	4	5	换	药				
8.22	27	29	1	4	5	换	药				
8.23	27	29	1	4	5	换	药				
8.24	27	29	1	4	5	换	药				
8.25	27	29	1	4	5	换	药				
8.26	27	29	1	4	5	换	药				
8.27	27	29	1	4	5	换	药				
8.28	27	29	1	4	5	换	药				
8.29	27	29	1	4	5	换	药				

Source: RHB

**Grouper fingerlings.** Qian Hu made its first sale of grouper fingerlings last year. We understand from management that this is a lucrative business, and the farm is already profitable on its own, recording CNY1m in revenue a month.

Typically, the farming of a grouper from fry to adult size takes, on average, 9-18 months. Qian Hu is involved in the nursery stage. It buys fry from local farms and pallet-trains the fry to grow them up to 5-cm long. After that, the fingerlings are sold to farmers that will continue to grow them. The whole process takes typically from three weeks to 1-2 months.

Management is confident that with its core technologies (the Hydro-Pure system), coupled with its herb-based fish medication and quality fish feed, the group will be able to expand the size of its aquaculture business several times to come close to that of its ornamental fish business. The fingerlings are currently being sold locally, as well being exported to Singapore, Malaysia and Vietnam. It represents 50% of the entire edible fish segment revenue in the Hainan farm. In FY17, the group sold 500,000 grouper fingerlings per month.

Figure 8: Giant grouper fingerlings



Source: RHB

Figure 9: Fish tanks for growing fingerlings



Source: RHB

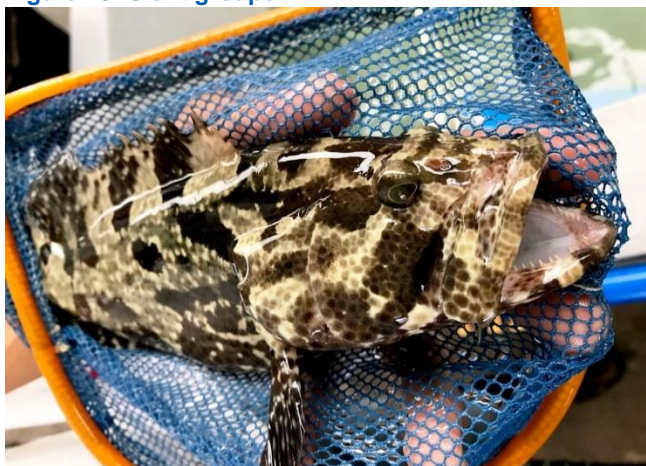
**Licensed to export edible fishes.** Qian Hu received its renewable export license (valid until 2022) in May, and has since started shipping fish to Singapore, Malaysia and Vietnam.

The fish that it exports are:

- i. Grouper fry;
- ii. Pompano fry;
- iii. Marble goby;
- iv. Snapper fry.

Fishes that it brings in from other farms are treated with its herbal medication and live in the hydro-pure filtered water for about a week before they are shipped out – and this treatment helps to ensure the fishes are of good quality. The group is currently exporting an average of four tonnes of marble goby a month (*soon hock* in Cantonese) since it started the exporting business. This segment contributes 50% to its farming revenue. Under the best-case scenario, we believe exports can increase up to 10 tonnes per month.

Figure 10: Giant grouper



Source: RHB

Figure 11: Red coral trout



Source: RHB

Figure 12: Packing grouper fingerlings



Source: RHB

Figure 13: Sealing up packed fingerlings for export



Source: RHB

**Ability to ship live marble goby without water.** Farm representatives showed us how it has a niche in a high-margin fish export business – by being able to pack and ship live fishes in waterless bags without compromising their health. This helps to reduce the freight cost by a significant amount. Figure 14 depicts a sample of marble goby packed live, which was brought to a local restaurant to be served as part of lunch. We also took this opportunity to savour the freshness of the “farm-to-table” marble goby.

**Figure 14: Packing live marble goby (packed without water)**



Source: RHB

**Figure 15: Farm-to-table steamed marble goby**



Source: RHB

**Land-based lobster farming at Tian Tian Fishery.** Management’s strategy for its lobster business is to create an ideal lobster farming model to educate the local farms and to convince them to convert their existing snail farms into higher-yield lobster farms. Qian Hu is experimenting with “*hua long*” (flower lobster) and “*qing long*” (green lobster) farming. Qian Hu believes that if it is successful, this will provide the company with a new revenue stream for the importing and selling of lobster fry.

The farm currently rears about 15,000 lobsters in ten tanks. Management is targeting have about 40,000 pcs lobsters in the model farm. The whole process of growing a baby lobster to 350g in weight takes 10-12 months. The selling price of a 350g lobster is CNY100.

**Figure 16: Finger-size baby lobster at Tian Tian Fishery**

**Figure 17: Farming baby lobsters**



Source: RHB

Source: RHB

**RHB Guide to Investment Ratings**

**Buy:** Share price may exceed 10% over the next 12 months

**Trading Buy:** Share price may exceed 15% over the next 3 months, however longer-term outlook remains uncertain

**Neutral:** Share price may fall within the range of +/- 10% over the next 12 months

**Take Profit:** Target price has been attained. Look to accumulate at lower levels

**Sell:** Share price may fall by more than 10% over the next 12 months

**Not Rated:** Stock is not within regular research coverage

**Investment Research Disclaimers**

RHB has issued this report for information purposes only. This report is intended for circulation amongst RHB and its affiliates' clients generally or such persons as may be deemed eligible by RHB to receive this report and does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. This report is not intended, and should not under any circumstances be construed as, an offer or a solicitation of an offer to buy or sell the securities referred to herein or any related financial instruments.

This report may further consist of, whether in whole or in part, summaries, research, compilations, extracts or analysis that has been prepared by RHB's strategic, joint venture and/or business partners. No representation or warranty (express or implied) is given as to the accuracy or completeness of such information and accordingly investors should make their own informed decisions before relying on the same.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to the applicable laws or regulations. By accepting this report, the recipient hereof (i) represents and warrants that it is lawfully able to receive this document under the laws and regulations of the jurisdiction in which it is located or other applicable laws and (ii) acknowledges and agrees to be bound by the limitations contained herein. Any failure to comply with these limitations may constitute a violation of applicable laws.

All the information contained herein is based upon publicly available information and has been obtained from sources that RHB believes to be reliable and correct at the time of issue of this report. However, such sources have not been independently verified by RHB and/or its affiliates and this report does not purport to contain all information that a prospective investor may require. The opinions expressed herein are RHB's present opinions only and are subject to change without prior notice. RHB is not under any obligation to update or keep current the information and opinions expressed herein or to provide the recipient with access to any additional information. Consequently, RHB does not guarantee, represent or warrant, expressly or impliedly, as to the adequacy, accuracy, reliability, fairness or completeness of the information and opinion contained in this report. Neither RHB (including its officers, directors, associates, connected parties, and/or employees) nor does any of its agents accept any liability for any direct, indirect or consequential losses, loss of profits and/or damages that may arise from the use or reliance of this research report and/or further communications given in relation to this report. Any such responsibility or liability is hereby expressly disclaimed.

Whilst every effort is made to ensure that statement of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable and must not be construed as a representation that the matters referred to therein will occur. Different assumptions by RHB or any other source may yield substantially different results and recommendations contained on one type of research product may differ from recommendations contained in other types of research. The performance of currencies may affect the value of, or income from, the securities or any other financial instruments referenced in this report. Holders of depositary receipts backed by the securities discussed in this report assume currency risk. Past performance is not a guide to future performance. Income from investments may fluctuate. The price or value of the investments to which this report relates, either directly or indirectly, may fall or rise against the interest of investors.

This report does not purport to be comprehensive or to contain all the information that a prospective investor may need in order to make an investment decision. The recipient of this report is making its own independent assessment and decisions regarding any securities or financial instruments referenced herein. Any investment discussed or recommended in this report may be unsuitable for an investor depending on the investor's specific investment objectives and financial position. The material in this report is general information intended for recipients who understand the risks of investing in financial instruments. This report does not take into account whether an investment or course of action and any associated risks are suitable for the recipient. Any recommendations contained in this report must therefore not be relied upon as investment advice based on the recipient's personal circumstances. Investors should make their own independent evaluation of the information contained herein, consider their own investment objective, financial situation and particular needs and seek their own financial, business, legal, tax and other advice regarding the appropriateness of investing in any securities or the investment strategies discussed or recommended in this report.

This report may contain forward-looking statements which are often but not always identified by the use of words such as "believe", "estimate", "intend" and "expect" and statements that an event or result "may", "will" or "might" occur or be achieved and other similar expressions. Such forward-looking statements are based on assumptions made and information currently available to RHB and are subject to known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievement to be materially different from any future results, performance or achievement, expressed or implied by such forward-looking statements. Caution should be taken with respect to such statements and recipients of this report should not place undue reliance on any such forward-looking statements. RHB expressly disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or circumstances after the date of this publication or to reflect the occurrence of unanticipated events.

The use of any website to access this report electronically is done at the recipient's own risk, and it is the recipient's sole responsibility to take precautions to ensure that it is free from viruses or other items of a destructive nature. This report may also provide the addresses of, or contain hyperlinks to, websites. RHB takes no responsibility for the content contained therein. Such addresses or hyperlinks (including addresses or hyperlinks to RHB own website material) are provided solely for the recipient's convenience. The information and the content of the linked site do not in any way form part of this report. Accessing such website or following such link through the report or RHB website shall be at the recipient's own risk.

This report may contain information obtained from third parties. Third party content providers do not guarantee the accuracy, completeness, timeliness or

availability of any information and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content.

The research analysts responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously. The research analysts that authored this report are precluded by RHB in all circumstances from trading in the securities or other financial instruments referenced in the report, or from having an interest in the company(ies) that they cover.

RHB and/or its affiliates and/or their directors, officers, associates, connected parties and/or employees, may have, or have had, interests in the securities or qualified holdings, in subject company(ies) mentioned in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities. Further, RHB and/or its affiliates may have, or have had, business relationships with the subject company(ies) mentioned in this report and may from time to time seek to provide investment banking or other services to the subject company(ies) referred to in this research report. As a result, investors should be aware that a conflict of interest may exist.

The contents of this report is strictly confidential and may not be copied, reproduced, published, distributed, transmitted or passed, in whole or in part, to any other person without the prior express written consent of RHB and/or its affiliates. This report has been delivered to RHB and its affiliates' clients for information purposes only and upon the express understanding that such parties will use it only for the purposes set forth above. By electing to view or accepting a copy of this report, the recipients have agreed that they will not print, copy, videotape, record, hyperlink, download, or otherwise attempt to reproduce or re-transmit (in any form including hard copy or electronic distribution format) the contents of this report. RHB and/or its affiliates accepts no liability whatsoever for the actions of third parties in this respect.

The contents of this report are subject to copyright. Please refer to Restrictions on Distribution below for information regarding the distributors of this report. Recipients must not reproduce or disseminate any content or findings of this report without the express permission of RHB and the distributors.

The securities mentioned in this publication may not be eligible for sale in some states or countries or certain categories of investors. The recipient of this report should have regard to the laws of the recipient's place of domicile when contemplating transactions in the securities or other financial instruments referred to herein. The securities discussed in this report may not have been registered in such jurisdiction. Without prejudice to the foregoing, the recipient is to note that additional disclaimers, warnings or qualifications may apply based on geographical location of the person or entity receiving this report.

The term "RHB" shall denote, where appropriate, the relevant entity distributing or disseminating the report in the particular jurisdiction referenced below, or, in every other case, RHB Investment Bank Berhad and its affiliates, subsidiaries and related companies.

## RESTRICTIONS ON DISTRIBUTION

### Malaysia

This report is issued and distributed in Malaysia by RHB Research Institute Sdn Bhd. The views and opinions in this report are our own as of the date hereof and is subject to change. If the Financial Services and Markets Act of the United Kingdom or the rules of the Financial Conduct Authority apply to a recipient, our obligations owed to such recipient therein are unaffected. RHB Research Institute Sdn Bhd has no obligation to update its opinion or the information in this report.

### Thailand

This report is issued and distributed in the Kingdom of Thailand by RHB Securities (Thailand) PCL, a licensed securities company that is authorised by the Ministry of Finance, regulated by the Securities and Exchange Commission of Thailand and is a member of the Stock Exchange of Thailand. The Thai Institute of Directors Association has disclosed the Corporate Governance Report of Thai Listed Companies made pursuant to the policy of the Securities and Exchange Commission of Thailand. RHB Securities (Thailand) PCL does not endorse, confirm nor certify the result of the Corporate Governance Report of Thai Listed Companies.

### Indonesia

This report is issued and distributed in Indonesia by PT RHB Sekuritas Indonesia. This research does not constitute an offering document and it should not be construed as an offer of securities in Indonesia. Any securities offered or sold, directly or indirectly, in Indonesia or to any Indonesian citizen or corporation (wherever located) or to any Indonesian resident in a manner which constitutes a public offering under Indonesian laws and regulations must comply with the prevailing Indonesian laws and regulations.

### Singapore

This report is issued and distributed in Singapore by RHB Research Institute Singapore Pte Ltd and it may only be distributed in Singapore to accredited investors, expert investors and institutional investors as defined in the Financial Advisers Regulations and the Securities and Futures Act (Chapter 289), as amended from time to time. By virtue of distribution to these categories of investors, RHB Research Institute Singapore Pte Ltd and its representatives are not required to comply with Section 36 of the Financial Advisers Act (Chapter 110) (Section 36 relates to disclosure of RHB Research Institute Singapore Pte Ltd 's interest and/or its representative's interest in securities). Recipients of this report in Singapore may contact RHB Research Institute Singapore Pte Ltd in respect of any matter arising from or in connection with the report.



**Hong Kong**

This report is issued and distributed in Hong Kong by RHB Securities Hong Kong Limited (興業僑豐證券有限公司) (CE No.: ADU220) (“RHBSHK”) which is licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities) and Type 4 (advising on securities) regulated activities. Any investors wishing to purchase or otherwise deal in the securities covered in this report should contact RHBSHK. RHBSHK is a wholly owned subsidiary of RHB Hong Kong Limited; for the purposes of disclosure under the Hong Kong jurisdiction herein, please note that RHB Hong Kong Limited with its affiliates (including but not limited to RHBSHK) will collectively be referred to as “RHBHK.” RHBHK conducts a full-service, integrated investment banking, asset management, and brokerage business. RHBHK does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this research report. Investors should consider this report as only a single factor in making their investment decision. Importantly, please see the company-specific regulatory disclosures below for compliance with specific rules and regulations under the Hong Kong jurisdiction. Other than company-specific disclosures relating to RHBHK, this research report is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such.

**United States**

This report was prepared by RHB and is being distributed solely and directly to “major” U.S. institutional investors as defined under, and pursuant to, the requirements of Rule 15a-6 under the U.S. Securities and Exchange Act of 1934, as amended (the “Exchange Act”). Accordingly, access to this report via Bursa Marketplace or any other Electronic Services Provider is not intended for any party other than “major” US institutional investors, nor shall be deemed as solicitation by RHB in any manner. RHB is not registered as a broker-dealer in the United States and does not offer brokerage services to U.S. persons. Any order for the purchase or sale of the securities discussed herein that are listed on Bursa Malaysia Securities Berhad must be placed with and through Auerbach Grayson (“AG”). Any order for the purchase or sale of all other securities discussed herein must be placed with and through such other registered U.S. broker-dealer as appointed by RHB from time to time as required by the Exchange Act Rule 15a-6. This report is confidential and not intended for distribution to, or use by, persons other than the recipient and its employees, agents and advisors, as applicable. Additionally, where research is distributed via Electronic Service Provider, the analysts whose names appear in this report are not registered or qualified as research analysts in the United States and are not associated persons of Auerbach Grayson AG or such other registered U.S. broker-dealer as appointed by RHB from time to time and therefore may not be subject to any applicable restrictions under Financial Industry Regulatory Authority (“FINRA”) rules on communications with a subject company, public appearances and personal trading. Investing in any non-U.S. securities or related financial instruments discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in the United States. The financial instruments discussed in this report may not be suitable for all investors. Transactions in foreign markets may be subject to regulations that differ from or offer less protection than those in the United States.

**OWNERSHIP AND MATERIAL CONFLICTS OF INTEREST****Malaysia**

RHB does not have qualified shareholding (1% or more) in the subject company (ies) covered in this report except for:

a) -

RHB and/or its subsidiaries are not liquidity providers or market makers for the subject company (ies) covered in this report except for:

a) -

RHB and/or its subsidiaries have not participated as a syndicate member in share offerings and/or bond issues in securities covered in this report in the last 12 months except for:

a) -

RHB has not provided investment banking services to the company/companies covered in this report in the last 12 months except for:

a) -

**Thailand**

RHB Securities (Thailand) PCL and/or its directors, officers, associates, connected parties and/or employees, may have, or have had, interests and/or commitments in the securities in subject company(ies) mentioned in this report or any securities related thereto. Further, RHB Securities (Thailand) PCL may have, or have had, business relationships with the subject company(ies) mentioned in this report. As a result, investors should exercise their own judgment carefully before making any investment decisions.

**Indonesia**

PT RHB Sekuritas Indonesia is not affiliated with the subject company(ies) covered in this report both directly or indirectly as per the definitions of affiliation above. Pursuant to the Capital Market Law (Law Number 8 Year 1995) and the supporting regulations thereof, what constitutes as affiliated parties are as follows:

1. Familial relationship due to marriage or blood up to the second degree, both horizontally or vertically;
2. Affiliation between parties to the employees, Directors or Commissioners of the parties concerned;
3. Affiliation between 2 companies whereby one or more member of the Board of Directors or the Commissioners are the same;
4. Affiliation between the Company and the parties, both directly or indirectly, controlling or being controlled by the Company;
5. Affiliation between 2 companies which are controlled, directly or indirectly, by the same party; or

## 6. Affiliation between the Company and the main Shareholders.

PT RHB Sekuritas Indonesia is not an insider as defined in the Capital Market Law and the information contained in this report is not considered as insider information prohibited by law. Insider means:

- a. a commissioner, director or employee of an Issuer or Public Company;
- b. a substantial shareholder of an Issuer or Public Company;
- c. an individual, who because of his position or profession, or because of a business relationship with an Issuer or Public Company, has access to inside information; and
- d. an individual who within the last six months was a Person defined in letters a, b or c, above.

**Singapore**

RHB Research Institute Singapore Pte Ltd and/or its subsidiaries and/or associated companies do not make a market in any securities covered in this report, except for:

- (a) -

The staff of RHB Research Institute Singapore Pte Ltd and its subsidiaries and/or its associated companies do not serve on any board or trustee positions of any issuer whose securities are covered in this report, except for:

- (a) -

RHB Research Institute Singapore Pte Ltd and/or its subsidiaries and/or its associated companies do not have and have not within the last 12 months had any corporate finance advisory relationship with the issuer of the securities covered in this report or any other relationship (including a shareholding of 1% or more in the securities covered in this report) that may create a potential conflict of interest, except for:

- (a) -

**Hong Kong**

The following disclosures relate to relationships between RHBHK and companies covered by Research Department of RHBSHK and referred to in this research report:

RHBSHK hereby certifies that no part of RHBSHK analyst compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

RHBHK had an investment banking services client relationships during the past 12 months with: -.

RHBHK has received compensation for investment banking services, during the past 12 months from: -.

RHBHK managed/co-managed public offerings, in the past 12 months for: -.

On a principal basis. RHBHK has a position of over 1% market capitalization of: -.

**Additionally, please note the following:**

**Ownership and material conflicts of interest:** RHBSHK policy prohibits its analysts and associates reporting to analysts from owning securities of any company covered by the analyst.

**Analyst as officer or director:** RHBSHK policy prohibits its analysts, and associates reporting to analysts from serving as an officer, director, advisory board member or employee of any company covered by the analyst.

RHBHK salespeople, traders, and other non-research professionals may provide oral or written market commentary or trading strategies to RHB clients that reflect opinions that are contrary to the opinions expressed in this research report.

This research report is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice.

Kuala Lumpur	Hong Kong	Singapore
<b>RHB Research Institute Sdn Bhd</b> Level 3A, Tower One, RHB Centre Jalan Tun Razak Kuala Lumpur 50400 Malaysia Tel : +(60) 3 9280 8888 Fax : +(60) 3 9200 2216	<b>RHB Securities Hong Kong Ltd.</b> 12 <sup>th</sup> Floor World-Wide House 19 Des Voeux Road Central, Hong Kong Tel : +(852) 2525 1118 Fax : +(852) 2810 0908	<b>RHB Research Institute Singapore Pte Ltd.</b> 10 Collyer Quay #09-08 Ocean Financial Centre Singapore 049315 Tel : +(65) 6533 1818 Fax : +(65) 6532 6211
Jakarta	Shanghai	Bangkok
<b>PT RHB Sekuritas Indonesia</b> Wisma Mulia, 20th Floor Jl. Jenderal Gatot Subroto No. 42 Jakarta 12710, Indonesia Tel : +(6221) 2783 0888 Fax : +(6221) 2783 0777	<b>RHB (China) Investment Advisory Co. Ltd.</b> Suite 4005, CITIC Square 1168 Nanjing West Road Shanghai 20041 China Tel : +(8621) 6288 9611 Fax : +(8621) 6288 9633	<b>RHB Securities (Thailand) PCL</b> 10th Floor, Sathorn Square Office Tower 98, North Sathorn Road, Silom Bangrak, Bangkok 10500 Thailand Tel : +(66) 2 088 9999 Fax : +(66) 2 088 9799