

POWER CONSTRUCTION JSC NO.1 (HSX: PC1)

Robust power construction activities

(VND bn)	1Q-FY19	4Q-FY18	+/-qoq	1Q-FY18	+/-yoy
Net revenue	1,286	1,507	-15%	856	50%
PAT	88	51	72%	63	39%
EBIT	131	95	38%	87	50%
EBIT margin	10.2%	6.3%	389bps	10.2%	0bps

Source: PC1, Rong Viet Securities

3M 2019 – Accelerating from the beginning of the year

- 1Q 2019 revenue and NPAT came at +50% and +38% YoY with recovering gross margin of 14% compared to 4Q 2018's 10%.
- Key growth factor came from strong power construction revenue (+137% YoY).
- Mong An and Bao Lac B HPPs are committed to schedules, ready to commence in late-2019.
- PCC1 Thanh Xuan, the new residential project, is going on sale in 2Q 2019.
- PC1 is planning to issue VND 1,280 Bn value of 10-year bond to fund its first solar power project.

FY2019 outlook – Power construction-related activities will provide rigorous growth, given dab contribution from real estate segment

We forecast that EVN's Capex disbursement into grid projects will allow PC1 to enjoy hefty backlog and revenue. Accordingly, we expect that PC1's construction and manufacturing revenue will collectively increase by 105% YoY in 2019, accompanied by an improved gross margin. Regarding PC1's investment portfolio, the four operating HPPs are going to contribute a solid VND 590 billion into PC1's revenue with outstanding gross margin of over 50%. Growth might be obtained in 2020 with two new HPPs in the pipe line. In addition, real estates might not contribute to 2019's revenue as PC1's two new projects will handover in 2020 and 2021. 2019's NPAT is forecasted at VND 407 billion, 13% lower YoY mostly due to rising interest expense.

Valuation and recommendation

We appreciate PC1's efforts to operate three distinctive business while maintaining the overall efficiency. Its power construction business still has ample room to grow owing to EVN's demand on new electricity infrastructure. This also provides opportunities to its steel structure manufacturing business. Regarding PC1's hydropower business, we think its stability will stand out as a major contributor of earnings to PC1. In fact, PC1's electricity portfolio, including two HPPs under construction and five other initiated projects, contributes the largest proportion in our PC1's sum-of-the-parts valuation. Last but not least, we appreciate PC1's ability to obtain prime-location land banks and its residential projects' profitability, which can act as a surprise factor to the company's earnings. Our SOTP valuation determines PC1's fair price at **VND 32,100** per share, higher than that in our 2019 Strategy Report mostly due to newly added HPP projects. It implies a **39%** upside as of the closing price on June 12th, 2019 as we recommend to **BUY** the stock.

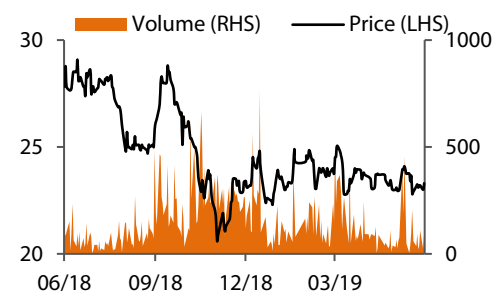
BUY +39%

Target price (VND)	32,100
Current market price (VND)	23,100

Stock Info	
Sector	Construction & Materials
Market Cap (VND billion)	3,067
Current Shares O/S	132,770,000
Avg. Daily Volume (in 20 sessions)	114,963
Free float (%)	100
52 weeks High	29,087
52 weeks Low	20,600
Beta	0.6

	FY2018	Current
EPS	3,514	3,699
EPS Growth (%)	73	39
Diluted EPS	3,514	3,699
P/E	7.1	6.2
P/B	1.1	0.9
EV/EBITDA	5.8	5.9
Cash div. yield (%)	-	-
ROE (%)	16.1	16.5

Price performance



Major Shareholders (%)	
Trinh Van Tuan (Chairman)	17.7
VEIL	11.1
Foreign ownership room (%)	10.2

Trinh Nguyen

(084) 028- 6299 2006 – Ext 1551

trinh.nh@vdsc.com.vn

Exhibit 1: 1Q 2019 Results

(VND Bn)	1Q-FY19	4Q-FY18	+/- (qoq)	1Q-FY18	+/- (YoY)
Net revenue	1,286	1,507	-14.7%	856	50.2%
Gross profit	183	156	17.1%	119	53.7%
SG&A	52	61	-15.3%	32	63.1%
Operating income	131	95	38.1%	87	50.2%
EBITDA	170	135	26.4%	126	35.5%
EBIT	131	95	38.1%	87	50.2%
Financial expenses	33	40	-17.8%	30	11.0%
- Interest Expenses	33	40	-17.7%	30	11.0%
Dep. and amortization	40	40	-1.2%	39	2.5%
Non-recurring items (*)					
Extraordinary items (*)					
PBT	102	76	34.4%	73	38.8%
PAT	88	51	72.1%	63	38.7%
(*) Adjusted PAT	88	51	72.1%	63	38.7%

Source: PC1, Rong Viet Securities

Exhibit 2: 1Q 2019 Performance Analysis

Particulars	1Q-FY19	4Q-FY18	+/- (qoq)	1Q-FY18	+/- (YoY)
Profitability Ratios (%)					
Gross Margin	14.2	10.3	386bps	13.9	32bps
EBITDA Margin	13.3	8.9	431bps	14.7	-144bps
EBIT Margin	10.2	6.3	389bps	10.2	0bps
Net Margin	6.8	3.4	343bps	7.4	-56bps
Adjusted Net Margin	6.8	3.4	343bps	7.4	-56bps
Turnover *(x)					
-Inventories	5	7	-2.0	2	2.2
-Receivables	3.0	3.8	-0.8	2.6	0.4
-Payables	3	5	-1.2	2	1.3
Leverage (%)					
Total Debt/ Equity	60.0	55.1	24bps	70.9	-1091bps

Source: Rong Viet Securities

Exhibit 3: 2Q 2019 Performance Forecast

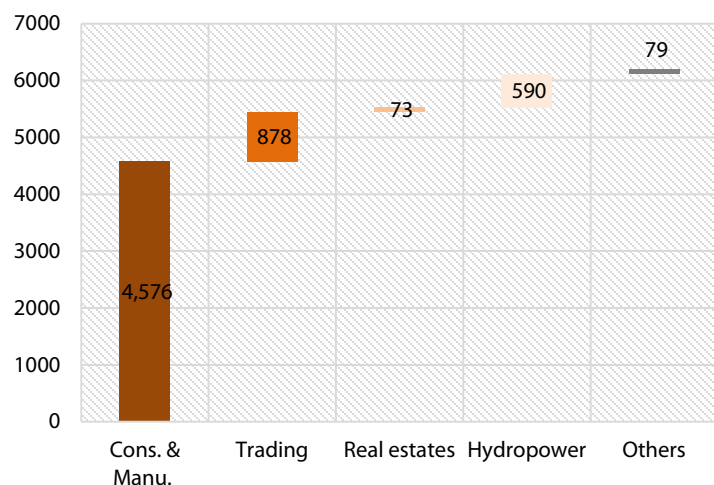
Particulars (VND Bn)	2Q-FY19	+/- qoq	+/- YoY
Revenue	1,363	6%	59%
Gross profit	198	8%	66%
EBIT	143	9%	64%
NPAT	89	2%	42%

Source: Rong Viet Securities

Updates

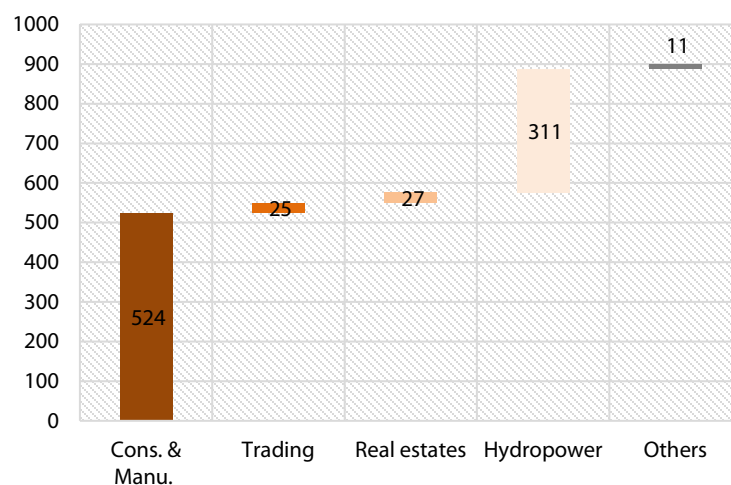
PC1 is paying 20% stock dividends, the ex-right date is June 21st, 2019.

Figure 1: 2019 forecasted revenue (VND billion)



Source: Rong Viet Securities

Figure 2: 2019 forecasted gross profit (VND billion)



Source: Rong Viet Securities

Power construction and steel structure manufacturing: surging revenue recognition and ample room for growth

1Q 2019 result was favorable for PC1's core business in terms of both progress and new signings. Despite the Tet quarter, PC1 managed to double its construction revenue from VND 301 billion in 1Q 2018 to VND 713 billion in 1Q 2019. PC1 has been taking advantage of its technical strength compared to industry peers in terms of equipment and construction technology related to overhead power line and underground cable system. PC1's major project, No.3 500kV transmission line has been boosting progress since the beginning of 2019, making ways for the following quarters' revenue recognition. Moreover, EVN's capital disbursements in 2019 will focus on grid projects totaling VND 48.6 trillion, which is going to give the leading company an important source of backlog. PC1's new contracts came at VND 600 billion in 1Q, signaling a robust new backlog for the whole years.

Accordingly, we forecast PC1's 2019 revenue for power construction and steel structure manufacturing at VND 3,539 and VND 1,037 billion respectively, being the strongest growing segments in PC1's operation. We expect construction and manufacturing's gross margins to reach 11% and 13% respectively in 2019, which is an improvement from 2018 yet lower than the historical average.

We also think that 2019 might be the peak year for PC1's construction and manufacturing activities as EVN is pushing electricity infrastructure construction. Afterwards, new contracts might come at a lower rate and PC1's construction revenue might decrease by over 20% in 2020. It can also be followed by a lower manufacturing output and revenue.

Electricity generation portfolio: solid contribution with promising future growth

PC1 is currently operating four hydropower plants, which are capable of nearly VND 600 billion to the consolidated revenue annually. Moreover, HPPs' gross margin was stabilized at a remarkable 46% in 2018, only second to that of the leasing property. The current hydropower portfolio is responsible for an estimated 17% of PC1's revenue and 35% of its gross profit in 2019.

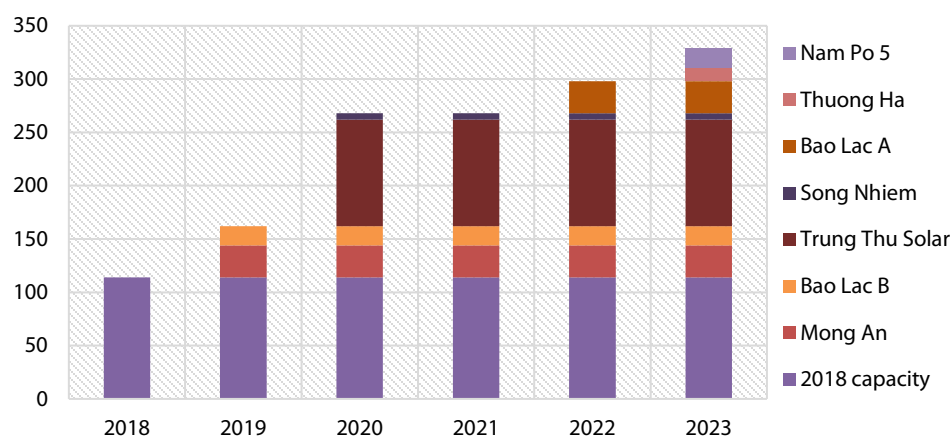
Two new HPPs are scheduled to commence in late-2019, which are Mong An and Bao Lac B. The two HPPs are VND 1,500 billion in investment value, have a total of 48MW in capacity and will add up to VND 196 billion in annual revenue to PC1's.

There are four more HPPs in the pipe line, which are Bao Lac A, Thuong Ha, Song Nhiem 4 and Nam Po 5. This means that PC1 will start new power plants in 2020, 2022 and 2023. The four HPPs when operating at full capacity will add 67 MW of electricity generation and bring about VND 289 billion in revenue for PC1 annually. It also means that another VND 1,948 billion of Capex to be disbursed in the next three years.

PC1 is going to build its first solar power plant, which is named Trung Thu Solar, for which the company will issue 10-year bonds. It should be noticed that PC1 plans the investment value at VND 1,495 billion for 100MW capacity, which is remarkably lower than a normal solar power plant, which costs more than VND 20 billion per MW to install. It is because PC1 makes use of the available space at its Trung Thu HPP thus saves land costs. PC1 plans to commence the solar power plant in 3Q 2020. At the estimated annual output of 150 million kWh and 8.13 cent per kWh in selling price, Trung Thu Solar is expected to add VND 279 billion to PC1's revenue per year.

We included the above projects' FCFEs in PC1's power portfolio and the total NPV came at VND 2,802 billion, which is the most valuable part of PC1's sum-of-parts valuation. The 11 power plants if operating at full respective capacity will altogether generating VND 1,333 billion in revenue and VND 700 billion in gross profit to the consolidated results. Indeed, we believe that this business is going to provide stability to PC1 due to the one-off feature of the construction, manufacturing and real estate segments. We predict that until PC1 has sufficient land bank to overlap its real estate projects, its hydropower portfolio will be the pillar of the company's earnings.

Figure 3: Forecasted electricity generation capacity (MWs)



Source: PC1, Rong Viet Securities

Real estates: Handovers of PCC1 Thanh Xuan and PCC1 Vinh Hung scheduled in 2020 and 2021

Procedures at PCC1 Thanh Xuan was delayed for six months, thus the plan to handover in 4Q 2019 has been changed to 1Q 2020. We forecast that PCC1 Thanh Xuan will bring about a total revenue of VND 942 billion, recognized in 2020 and 2021. Accordingly, condo sales will only have around VND 51 billion revenue from My Dinh Plaza 2 in 2019.

PC1 has two other projects in the pipe line, both in the suburban area of Hanoi. PCC1 Vinh Hung is scheduled to start construction in Q3 2019 while PCC1 Thang Long is going to be submitted for approval in Q2 2019. We expect the selling price to range from VND 25 to 30 million per sqm. We estimated that the two projects can bring about nearly VND 2,500 billion in revenue for PC1, recognizable in 2021, 2022 and 2023. It also means that PC1 will have continuous revenue and earnings from this segment during 2020-2023.

We use NPV method to evaluate each of the three projects and determine this segment's contribution into the company valuation at VND 376 billion. This valuation includes the leasing activities in the commercial areas of PC1's current and future projects.

Financials: Rising debts putting pressures on PC1's interest expense

In order to fund its power plants' construction as well as real estate projects, PC1 needs to take on long-term debts. We estimate that PC1 will increase a total of VND 2,649 billion of 15-year debts mostly for the power plants in 2019 and 2020, which use 70-80% debt ratio. At the current average long-term interest rate of 7.8%, PC1 will incur VND 220 billion in interest expense for 2019, 46% higher YoY, which is a considerable burden on its profit. It needs noticing that the current borrowing rate offered to PC1's hydropower plant is around 9.5% and each one percent increase in the long-term interest rate will likely cost PC1 5.2% of its PBT.

PC1 is planning to issue VND 1,280 billion 10-year bond for Trung Thu Solar Power Plant. We think that issuing bonds is one of the feasible financing decisions provided that many commercial banks have reached their credit limits to the solar energy sector. In return for a heavy disbursement in a short period of time, PC1 might have to bear higher interest rate (than 9.5% per annum) on the loan.

Valuation

We use sum-of-the-parts method to evaluate the stock.

We apply 9.4 times P/E to 2019's earnings of the construction and manufacturing segments. The P/E is estimated using the market-cap weighted average of similar listed companies which are CTD, HBC, TV2, SJE and VGC, discounted 10%.

We use FCFE method to value PC1's hydropower and solar power plants at 14.2% cost of equity. Compared to the last update, we added five new projects.

We use NPV method to value PC1's real estate projects and its leasing assets at WACC 15%.

The SOTP value arrives at **VND 32,100 per share**, implying a **FY2019 P/E of 11.6x** and a **total stock return of 41%** as of closing price on May 31st, 2019. The new target price is revised up from that in our 2019 Strategy Report (VND 28,200) because of the expanded electricity generation portfolio. Investors should bear in mind that most of the new power plants can only increase PC1's future cash flows without any material improvements in the short-term performance. This is why we raised our target price on the stock even though the forecasted 2019 performance seems modest.

Table 1: PC1 valuation

Segment	Method	Valuation (VND billion)	Contribution (VND per share)
Power construction & steel structure manufacturing	P/E	1,719	12,950
Electricity generation	FCFE	2,082	15,680
Real estates			
Project development	NAV	376	2,833
Leasing	FCFE		
Mining	Book value	85	643
Target price (VND per share)			32,100

Source: Rong Viet Securities

VND Billion

INCOME STATEMENT	FY2017	FY2018	FY2019F	FY2020F
Revenue	3,161	5,084	6,197	6,018
COGS	2,679	4,219	5,298	4,897
Gross profit	481	866	899	1,120
Selling expenses	-17	47	53	44
G&A expenses	143	161	197	191
Financial income	11	28	28	21
Financial expense	103	150	220	338
Other income/loss	40	39	38	40
Gain/(loss) from JVs	1	5	5	5
PBT	303	579	500	613
Tax expense	47	88	76	121
Minority interests	20	25	18	16
PAT	237	467	407	476
EBIT	355	657	649	885

%

FINANCIAL RATIO	FY2017	FY2018	FY2019F	FY2020F
Growth (%)				
Revenue	5.1	60.9	21.9	-2.9
Operating Income	8.6	72.5	8.8	9.7
EBITDA	-10.6	85.1	-1.3	36.4
PAT	-22.3	97.1	-12.8	17.0
Total Assets	37.2	6.2	37.5	18.5
Equity	37.1	16.2	10.3	10.9
Profitability (%)				
Gross margin	15.2	17.0	14.5	18.6
EBITDA margin	14.9	16.0	14.2	16.1
EBIT margin	11.2	12.9	10.5	14.7
Net margin	7.5	9.2	6.6	7.9
ROA	3.8	7.1	4.5	4.4
ROE	8.8	15.0	11.8	12.5
Efficiency (times)				
Receivable Turnover	2.4	3.3	3.1	3.1
Inventory Turnover	2.5	5.6	3.1	2.8
Payable Turnover	1.8	3.4	3.1	3.1
Liquidity (times)				
Current	1.7	1.9	1.7	1.6
Quick	1.1	1.4	1.1	0.9
Finance Structure (%)				
Total Debt/Equity	67.8	63.1	104.9	131.0
Current Debt/Equity	11.0	13.3	28.3	28.9
Long-term Debt/Equity	56.9	49.8	76.5	102.1

VND Billion

BALANCE SHEET	FY2017	FY2018	FY2019F	FY2020F
Cash and cash equivalents	567	701	734	383
Short-term investments	100	90	99	109
Accounts receivable	1,302	1,552	2,021	1,962
Inventories	1,085	759	1,719	1,775
Other current assets	38	47	52	57
Property, plant & equipment	2,918	3,142	4,135	6,145
Acquired intangible assets	74	100	102	107
Long-term investments	91	97	102	106
Other non-current assets	38	108	108	108
Total assets	6,214	6,597	9,072	10,752
Accounts payable	1,487	1,248	1,717	1,587
Short-term borrowings	294	416	975	1,103
Long-term borrowings	1,527	1,554	2,633	3,891
Other non-current liabilities	40	23	24	25
Bonus and Welfare fund	52	77	106	139
Technology-science, dev. fund	0	0	0	0
Total liabilities	3,400	3,318	5,455	6,746
Common stock and APIC	1,866	2,039	*2,270	2,270
Treasury stock (enter as -)	0	0	0	0
Retained earnings	716	925	997	1,349
Other comprehensive income	23	56	56	56
Inv. and Dev. Fund	79	99	117	138
Total equity	2,684	3,119	3,440	3,813
Minority Interest	130	160	178	194

(*) after 20% stock dividends, ex-right date June 21st, 2019

VALUATION RATIO (*)	FY2017	FY2018	FY2019F	FY2020F
EPS (dong)	1,854	3,344	2,757	3,333
P/E (x)	20.3	7.1	8.5	7.0
BV (dong)	20,216	23,494	26,342	29,675
P/B (x)	1.6	1.0	1.0	0.9
DPS (dong/cp)	0	0	0	0
Dividend yield (%)	-	-	-	-

VALUATION MODEL	Price	Weight	Average
Sum-of-the-parts	32,100	100%	32,100

Target price (VND) **32,100**

VALUATION HISTORY	Price	Recommendation	Period
14/12/2018	28,200	Buy	Intermediate term
04/02/2018	31,174	Neutral	Intermediate term
30/05/2017	27,185	Accumulate	Intermediate term

RESULT UPDATE

This report is created for the purpose of providing investors with an insight into the discussed company that may assist them in the decision-making process. The report comprises analyses and projections that are based on the most up-to-date information with the objective that is to determine the reasonable value of the stock at the time such analyses are performed. Through this report, we strive to convey the complete assessment and opinions of the analyst relevant to the discussed company. To send us feedbacks and/or receive more information, investors may contact the assigned analyst or our client support department.

RATING GUIDANCE

Ratings	BUY	ACCUMULATE	REDUCE	SELL
Total Return including Dividends in 12-month horizon	>20%	5% to 20%	-20% to -5%	<-20%

ABOUT US

RongViet Securities Corporation (RongViet) was established in 2007, licensed to perform the complete range of securities services including brokerage, financial investment, underwriting, financial and investment advisory and securities depository. RongViet now has an operating network that spreads across the country. Our major shareholders, also our strategic partners, are reputable institutions, i.e. Eximbank, Viet Dragon Fund Management, etc... Along with a team of the professional and dynamic staffs, RongViet has the man power as well as the financial capacity to bring our clients the most suitable and efficient products and services. Especially, RongViet was one of the very first securities firms to pay the adequate attention to the development of a team of analysts and the provision of useful research report to investors.

The **Analysis and Investment Advisory Department** of RongViet Securities provides research reports on the macro-economy, securities market and investment strategy along with industry and company reports and daily and weekly market reviews.

ANALYSIS & INVESTMENT ADVISORY DEPARTMENT
Lam Nguyen
Deputy Manager

lam.ntp@vdsc.com.vn
 + 84 28 6299 2006 (1313)
 • Banking
 • Market Strategy

Duong Lai
Senior Analyst

duong.ld@vdsc.com.vn
 + 84 28 6299 2006 (1522)
 • Real Estate
 • Building Materials

Vu Tran
Senior Analyst

vu.thx@vdsc.com.vn
 + 84 28 6299 2006 (1518)
 • Oil & Gas
 • Fertilizer

Trinh Nguyen
Senior Analyst

trinh.nh@vdsc.com.vn
 + 84 28 6299 2006 (1551)
 • Steel
 • Construction

Son Phan
Senior Analyst

son.pnt@vdsc.com.vn
 + 84 28 6299 2006 (1519)
 • Utilities
 • Natural Rubber

Tu Vu
Analyst

tu.va@vdsc.com.vn
 + 84 28 6299 2006 (1511)
 • Macroeconomics

Son Tran
Analyst

son.tt@vdsc.com.vn
 + 84 28 6299 2006 (1527)
 • Market Strategy
 • Consumer discretionary
 • Pharmaceuticals

Tung Do
Analyst

tung.dt@vdsc.com.vn
 + 84 28 6299 2006 (1521)
 • Logistics
 • Aviation

Thu Pham
Analyst

thu.pa@vdsc.com.vn
 + 84 28 6299 2006 (1520)
 • Industrial Real Estate
 • Infrastructure & BOT

Thao Dang
Analyst

thao.dtp@vdsc.com.vn
 + 84 28 6299 2006 (1529)
 • Food & Beverage
 • Textiles

Tam Pham
Analyst

tam.ptt@vdsc.com.vn
 + 84 28 6299 2006 (1530)
 • Insurance
 • Fishery

Anh Nguyen
Analyst

anh2.ntt@vdsc.com.vn
 + 84 28 6299 2006 (1531)
 • Banking

Vy Nguyen
Analyst

vy.ntk@vdsc.com.vn
 + 84 28 6299 2006 (1528)
 • Automobile & Parts

Trinh Le
Analyst

trinh.lx@vdsc.com.vn
 + 84 28 6299 2006 (1536)
 • Industrials
 • Agricultural Medicine

Hoang Nguyen
Analyst

hoang.nt@vdsc.com.vn
 + 84 28 6299 2006 (1538)
 • Market Strategy

Ha Tran
Assistant

ha.ttn@vdsc.com.vn
 + 84 28 6299 2006 (1526)

Vi Truong
Assistant

vi.ttt@vdsc.com.vn
 + 84 28 6299 2006 (1517)

DISCLAIMERS

This report is prepared in order to provide information and analysis to clients of Rong Viet Securities only. It is and should not be construed as an offer to sell or a solicitation of an offer to purchase any securities. No consideration has been given to the investment objectives, financial situation or particular needs of any specific. The readers should be aware that Rong Viet Securities may have a conflict of interest that can compromise the objectivity of this research. This research is to be viewed by investors only as a source of reference when making investments. Investors are to take full responsibility of their own decisions. VDSC shall not be liable for any loss, damages, cost or expense incurring or arising from the use or reliance, either full or partial, of the information in this publication.

The opinions expressed in this research report reflect only the analyst's personal views of the subject securities or matters; and no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or opinions expressed in the report.

The information herein is compiled by or arrived at Rong Viet Securities from sources believed to be reliable. We, however, do not guarantee its accuracy or completeness. Opinions, estimations and projections expressed in this report are deemed valid up to the date of publication of this report and can be subject to change without notice.

This research report is copyrighted by Rong Viet Securities. All rights reserved. Therefore, copy, reproduction, republish or redistribution by any person or party for any purpose is strictly prohibited without the written permission of VDSC. Copyright 2016 Viet Dragon Securities Corporation.

IMPORTANT DISCLOSURES FOR U.S. PERSONS

This research report was prepared by Viet Dragon Securities Corp. ("VDSC"), a company authorized to engage in securities activities in Vietnam. VDSC is not a registered broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act").

Additional Disclosures

This research report is for distribution only under such circumstances as may be permitted by applicable law. This research report has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient, even if sent only to a single recipient. This research report is not guaranteed to be a complete statement or summary of any securities, markets, reports or developments referred to in this research report. Neither VDSC nor any of its directors, officers, employees or agents shall have any liability, however arising, for any error, inaccuracy or incompleteness of fact or opinion in this research report or lack of care in this research report's preparation or publication, or any losses or damages which may arise from the use of this research report.

VDSC may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups, or affiliates of VDSC.

Investing in any non-U.S. securities or related financial instruments (including ADRs) 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 such 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 effect within the United States.

The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Past performance is not necessarily a guide to future performance and no representation or warranty, express or implied, is made by VDSC with respect to future performance. Income from investments may fluctuate. The price or value of the investments to which this research report relates, either directly or indirectly, may fall or rise against the interest of investors. Any recommendation or opinion contained in this research report may become outdated as a consequence of changes in the environment in which the issuer of the securities under analysis operates, in addition to changes in the estimates and forecasts, assumptions and valuation methodology used herein.

No part of the content of this research report may be copied, forwarded or duplicated in any form or by any means without the prior.

RESEARCH DISCLOSURES

Third Party Research

This is third party research. It was prepared by Rong Viet Securities Corporation (Rong Viet), with headquarters in Ho Chi Minh City, Vietnam. Rong Viet is authorized to engage in securities activities according to its domestic legislation. This research is not a product of Tellimer Markets, Inc., a U.S. registered broker-dealer. Rong Viet has sole control over the contents of this research report. Tellimer Markets, Inc. does not exercise any control over the contents of, or the views expressed in, research reports prepared by Rong Viet.

Rong Viet is not registered as a broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" and other "U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act").

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Tellimer Markets, Inc., located at Floor 36, 444 Madison Avenue, Floor 36, New York, NY 10022. A representative of Tellimer Markets, Inc. is contactable on +1 (212) 551 3480. Under no circumstances should any U.S. recipient of this research report effect any transaction to buy or sell securities or related financial instruments through Rong Viet. Tellimer Markets, Inc. accepts responsibility for the contents of this research

report, subject to the terms set out below, to the extent that it is delivered to a U.S. person other than a major U.S. institutional investor.

None of the materials provided in this report may be used, reproduced, or transmitted, in any form or by any means, electronic or mechanical, including recording or the use of any information storage and retrieval system, without written permission from.

Rong Viet is the employer of the research analyst(s) responsible for the content of this report and research analysts preparing this report are resident outside the U.S. and are not associated persons of any U.S. regulated broker-dealer. The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA") and may not be an associated person of Tellimer Markets, Inc. and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

Tellimer Markets, Inc. or its affiliates has not managed or co-managed a public offering of securities for the subject company in the past 12 months, has not received compensation for investment banking services from the subject company in the past 12 months, and does not expect to receive or intend to seek compensation for investment banking services from the subject company in the next three months. Tellimer Markets, Inc. has never owned any class of equity securities of the subject company. There are no other actual, or potential, material conflicts of interest of Tellimer Markets, Inc. at the time of the publication of this report. As of the publication of this report, Tellimer Markets, Inc. does not make a market in the subject securities.

About Tellimer

Tellimer is a registered trade mark of Exotix Partners LLP. Exotix Partners LLP and its subsidiaries ("Tellimer") provide specialist investment banking services to trading professionals in the wholesale markets. Tellimer draws together liquidity and matches buyers and sellers so that deals can be executed by its customers. Tellimer may at any time, hold a trading position in the securities and financial instruments discussed in this report. Tellimer has procedures in place to identify and manage any potential conflicts of interests that arise in connection with its research. A copy of Tellimer's conflict of interest policy is available at www.tellimer.com/regulatory-information.

Distribution

This report is not intended for distribution to the public and may not be reproduced, redistributed or published, in whole or in part, for any purpose without the written permission of Tellimer. Tellimer shall accept no liability whatsoever for the actions of third parties in this respect. This report is for distribution only under such circumstances as may be permitted by applicable law.

This report may not be used to create any financial instruments or products or any indices. Neither Tellimer, nor its members, directors, representatives, or employees accept any liability for any direct or consequential loss or damage arising out of the use of all or any part of the information herein.

United Kingdom: Distributed by Exotix Partners LLP only to Eligible Counterparties or Professional Clients (as defined in the FCA Handbook). The information herein does not apply to, and should not be relied upon by, Retail Clients (as defined in the FCA Handbook); neither the FCA's protection rules nor compensation scheme may be applied.

UAE: Distributed in the Dubai International Financial Centre by Exotix Partners LLP (Dubai) which is regulated by the Dubai Financial Services Authority ("DFSA"). Material is intended only for persons who meet the criteria for Professional Clients under the Rules of the DFSA and no other person should act upon it.

Other distribution: The distribution of this report in other jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restriction.

Disclaimers

Tellimer and/or its members, directors or employees may have interests, or long or short positions, and may at any time make purchases or sales as a principal or agent of the securities referred to herein. Tellimer may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups of Tellimer.

Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this 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 such 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 effect within the United States. The value of any investment or income from any securities or related financial instruments discussed in this report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Frontier and Emerging Market laws and regulations governing investments in securities markets may not be sufficiently developed or may be subject to inconsistent or arbitrary interpretation or application. Frontier and Emerging Market securities are often not issued in physical form and registration of ownership may not be subject to a centralised system. Registration of ownership of certain types of securities may not be subject to standardised procedures and may even be effected on an ad hoc basis. The value of investments in Frontier and Emerging Market securities may also be affected by fluctuations in available currency rates and exchange control regulations. Not all of these or other risks associated with the relevant company, market or instrument which are the subject matter of the report are necessarily considered.