

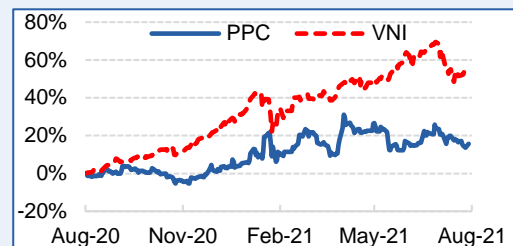


Pha Lai Thermal Power JSC (PPC) [OUTPERFORM +18.8%]

Update Report

Industry:	Utilities					
Report Date:	August 4, 2021	Rev Y/Y	-3.1%	-44.2%	72.1%	14.1%
Current Price:	VND22,550	EPS Y/Y	-19.8%	-48.7%	55.6%	10.5%
Target Price:	VND25,300	NPAT (VND bn)	1,011	518	807	892
Last Target Price:	VND30,800	Dividend yield	26.1%	6.7%	11.1%	11.1%
Upside to TP:	+12.2%	DPS (VND)	5,894	1,500	2,500	2,500
Dividend Yield:	6.7%	EV/EBITDA	6.2x	N.M.	9.1x	7.4x
TSR:	+18.8%	P/E	7.5x	14.5x	9.3x	8.5x

Market Cap:	USD310.2 mn		<u>PPC</u>	<u>Peers</u>	<u>VNI</u>
Foreign Room:	USD103.2 mn	P/E (ttm)	8.9x	14.5x	16.8x
ADTV30D:	USD234,000	EV/EBITDA	10.4x	7.5x	N/A
State Ownership:	51%	Net D/E	-22.5%	57.0%	N/A
Outstanding Shares:	320.6 mn	ROE	14.0%	8.6%	16.1%
Fully Diluted Shares:	320.6 mn	ROA	12.4%	3.1%	2.6%



Company Overview

PPC owns two coal-fired power plants in northern Vietnam with capacity of 1,040 MW: Pha Lai 1 (4x110 MW, 34 years old) and Pha Lai 2 (2x300 MW, 17 years old). PPC also has respective 27% and 16% stakes in the Hai Phong (UPCoM: HND/1,200 MW) and Quang Ninh (UPCoM: QTP/1,200 MW) coal-fired plants.

Nghia Le
 Analyst
nghia.le@vcsc.com.vn
 +848 3914 3588 ext. 173

Duong Dinh
 Senior Manager
duong.dinh@vcsc.com.vn
 +848 3914 3588 ext. 140

Attractive valuations despite technical challenges

- We cut our target price (TP) by 18% and downgrade our rating to OUTPERFORM from BUY.
- While we still like PPC for its robust dividend yields and the potential value contribution from its associate companies, one of the two generators at the Pha Lai 2 plant (PPC's main profit contributor) was shut down in April 2021 due to a technical issue and has since been nonoperational. PPC is pressing forward with repairs and plans for a full resumption of operations by end-September. While we cut our forecast in accordance with the PPC's guidance for Pha Lai 2's resumption, we recognize that potential delays could impact PPC's earnings in 2022F and 2021F (as EVN could reduce PPC's 2022F contracted volume if the issues are not fixed in time).
- Our TP cut is mainly due to a 41% cut to our 2021F NPAT and 7% trim to our cumulative 2022F-2030F NPAT to reflect the technical issue at Pha Lai 2 and the fact that Pha Lai 1's heat rate did not improve as we expected in H1 2021. We apply an additional 5% valuation discount to reflect the potential forecast risks related to the resumption of Pha Lai 2's full operation. We also adjust our terminal growth assumption from 1% to 0% as we lower our expectation from the potential valuation contribution from the Pha Lai 3 (600 MW) power plant.
- Despite the forecast 49% slump in 2021F NPAT, we expect 2022F NPAT to rebound 56% YoY thanks to a rebound in contracted volume and the full operation of the Pha Lai 2 plant.
- We lower our 2021F DPS forecast by 25% to VND1,500 while maintaining our DPS forecast of VND2,500 for 2022F and 2023F.
- PPC is trading at an 2022F PER of 9.3x, based on our forecast, which is attractive against the four-year average of our selected peer group median TTM PER of 13.7x.
- Downside risks: Pha Lai 2's full operation resumption is delayed.

Pha Lai 2 to resume full operation by end-September 2021. In early April 2021, the S6 generator at Pha Lai 2 experienced a malfunction and was required to be shut down for maintenance, which is expected to be completed by end-September 2021, per PPC. Due to this technical shutdown, a regular maintenance project for the S5 generator was required to be pushed back from August-September to October-November. Due to this tight schedule and the fact that EVN will start collecting operational data from power plants to calculate contracted volume for 2022F in late 2021, any delays to the above schedule could result in earnings hits in both 2021F and 2022F.

Sales volume to rebound 66% YoY in 2022F from low base in 2021F. Our forecast is predicated on our expectation for a strong recovery in Vietnam's overall electricity demand in 2022F after Vietnam's export-oriented manufacturing sector recovers from the current resurgence of COVID-19. A demand-driven recovery should result in a strong rebound in the contracted volume granted by EVN in 2022F after a cut in 2021F as well as higher volume sold to the competitive market.

H1 2021: Partial shutdown at Pha Lai 2 hurts earnings

Figure 1: PPC's H1 2021 results

VND bn	H1 2020	H1 2021	YoY growth	% of old 2021F	VCSC's comments YoY growth performance
Sales volume (million kWh)	3,169	1,623	-49%	41%	* Contracted volume granted by EVN only reached 1.3 billion kWh in H1 2021 — down 50% YoY. * Unattractive competitive generation market (CGM) prices in H1 2021 discouraged PPC to generate to CGM, causing CGM volume to slump 40% YoY.
ASP (VND/kWh)*	1,420	1,415	0%	98%	
Average material cost (VND/kWh)	1,137	1,177	4%	108%	* Average coal cost increased 4% mainly due to a higher contribution Pha Lai 1's sales volume. This plant has a higher heat rate (requiring a higher amount of coal to generate the same unit of electricity) than Pha Lai 2.
Price spread (VND/kWh)*	283	238	-16%	66%	* Mainly driven by higher material costs.
Revenue	4,500	2,297	-49%	40%	* Mainly driven by lower sales volume.
COGS	-4,165	-2,343	-44%	44%	
Gross profit	335	-46	N/A	N/A	* Profit slumped due to lower sales volume amid a relatively fixed cost structure. * Profit was partly supported by a ~50% cut in maintenance expense booking in Q1 2021, while this item was flat YoY in Q2 2022.
G&A	-39	-50	30%	76%	
Operating profit (EBIT)	296	-96	-133%	-22%	
Net interest income	40	42	5%	45%	
Dividend income	143	287	101%	63%	* HND advanced a VND2,150/share cash dividend in H1 2021 vs VND1,100/share H1 2020.
Provision expense	4	25	N/A	N/A	* Includes reversed provisions for PPC's equity investments.
PBT	483	258	-46%	26%	
Income tax exp	-68	0		0%	
PPC's reported NPAT	415	259	-38%	29%	* Mainly due to lower contracted volume and a partial shutdown at the Pha Lai 2 power plant.
PPC's adjusted NPAT	408	240	-41%	27%	
ASSOCIATE COMPANIES:					
HND's reported NPAT	746	177	-76%	36%	* Mainly due to a scheduled reduction in the fixed component in its power purchasing agreement (PPA) price that took effect on January 1, 2021, and a 16% YoY slump in sales volume due to both lower contracted volume and CGM volume.
HND's adjusted NPAT	765	151	-80%	31%	
QTP's reported NPAT	21	310	1376.5%	41%	* H1 2020 was a low base due to higher quarterly depreciation expenses. We note that QTP stretched its depreciation schedule and reduced its annual depreciation expenses in 2020. However, the compounded full-year impact of lowering depreciation expenses was only concentrated in Q4 2020.
QTP's adjusted NPAT	36	304	755.8%	40%	* QTP's EBITDA (which represents QTP's core power generation profit) was down 22% YoY in H1 2021.

Source: PPC, VCSC; (*) excludes one-off income/expenses and FX gains/losses.

2021F: Lower NPAT to reflect Pha Lai 2's partial shutdown

Figure 2: PPC's 2021 outlook

VND bn	2020	2021F	YoY	2021F New vs Old	VCSC's comments for: (1) 2021F forecast YoY changes (2) new vs old 2021F forecast
Sales volume (million kWh)	5,265	3,072	-42%	77%	(1) + (2) revised down to reflect the partial shutdown at Pha Lai 2 plant between April and September 2021.
Pha Lai 1 (million kWh)	1,682	858	-49%	0%	
Pha Lai 2 (million kWh)	3,583	2,214	-38%	-29%	
ASP* (VND/kWh)	1,456	1,407	-3%	-3%	(1) Mainly due to a lower contribution from contracted volume that is forecast to be sold at a higher price vs CGM volume in 2021F. (2) Mainly as we lower PPC's 2021 CGM prices.
Average material cost (VND/kWh)	1,131	1,128	0%	4%	(2) We raise our material cost forecast by 4% as our previous forecast for an improvement in heat rate did not materialize.
Price spread* (VND/kWh)	325	279	-14%	-23%	(2) Mainly driven by the 3% decline in ASP.
Revenue	7,929	4,422	-44%	-23%	(1) Due to a 46% decline in volume and a lower recognition of delayed FX payments. (2) We revise down mainly due lower sales volume, which is partly offset by our new forecast for VND100bn (USD4mn) of delayed FX payments.
Normalized revenue*	7,689	4,322	-45%	-27%	(1) Adjusted for VND240bn (USD10mn) and VND100bn (USD4mn) of delayed FX payments in 2020 and 2021F, respectively.
COGS	-6,920	-4,373	-37%	-17%	
Gross profit	1,009	49	-95%	-90%	
Normalized gross profit*	769	-51	N/A	N/A	
G&A	-81	-85	5%	28%	(2) We revise up as H1 2021 expenses exceed our expectation.
Operating profit (EBIT)	928	-36	N/A	N/A	
Net interest income	82	94	15%	-2%	
Dividend received	203	453	124%	0%	
In which: Dividend from HND	180	357	98%	0%	
In which: Dividend from QTP	15	75	400%	0%	
Net other income	-2	25	N/A	N/A	(2) We revise up as H1 2021 income exceeds our expectation.
PBT	1,211	535	-56%	-46%	
Income tax exp	-200	-16	-92%	-85%	
Reported NPAT	1,011	518	-49%	-41%	(1) Mainly driven by - Lower sales volume due to lower contracted volume, unattractive CGM prices that discourage PPC to generate for the CGM, and a partial six-month shutdown of the Pha Lai 2 power plant. - A 14% price spread compression. - Lower recognition of delayed FX payments. (2) We revise down our earnings forecast as: - We model in a partial shutdown of Pha Lai 2 plant, which results in lower sales volume. - We revise up coal costs as our previous assumption for a heat rate improvement at PPC did not materialize. - These two items are partly offset by our new forecast for VND100bn (USD4mn) of delayed FX payments (per PPC's guidance).
Non-recurring item	191	100	-48%	N/A	
Adjusted NPAT*	820	418	-49%	-52%	

Source: PPC, VCSC; (*) excludes one-off income/expenses and FX gains/losses.

QTP 2021F: Earnings to slump due to absence of one-off FX payments

Figure 3: QTP's 2021 outlook

VND bn	2020	2021F	YoY	2021F New vs Old	VCSC's comments for: (1) 2021F forecast YoY changes (2) new vs old 2021F forecast
Sales volume (million kWh)	5,351	5,733	7%	0%	(1) Volume to increase from a low base in 2020 when QTP's power plants were stopped for major maintenance projects in Q4 2020.
ASP* (VND/kWh)	1,610	1,548	-4%	0%	(1) Abnormally high ASP in 2020 includes compensation for contracted volume that EVN did not mobilize.
Average material cost (VND/kWh)	1,072	1,093	2%	0%	
Price spread* (VND/kWh)	538	455	-16%	0%	(1) Adjusted price spread to contract 16% from a high base in 2020 that included compensation for contracted volume that EVN did not mobilize.
Revenue	9,182	8,873	-3%	0%	(1) Mainly driven by 7% YoY sales volume growth from a low base in 2020 when QTP's power plants were stopped for major maintenance projects in Q4 2020. 2020 revenue included VND568bn (USD24mn) of delayed FX payment.
Normalized revenue*	8,615	8,873	3%	0%	
- Cost of goods sold	-7,348	-7,808	6%	0%	
Gross profit	1,834	1,065	-42%	0%	(1) Mainly due to the absence of the VND568bn (USD24mn) delayed FX payment recorded in 2020.
Normalized gross profit*	1,266	1,065	-16%	0%	(1) Normalized profits slumped 16% due to the absence of compensation for contracted volume that EVN did not mobilize.
- SG&A	-105	-110	5%	0%	
Operating profit (EBIT)	1,729	955	-45%	0%	(1) Mainly thanks to QTP's strong operating cash flow and debt repayment.
Net interest income	-264	-153	-42%	0%	(2) We revise up 2021F net interest expenses as we model in a higher cash dividend for FY2020, causing QTP's net debt balance to be higher than our previous forecast.
Net FX gain/loss	-83	0	N/A	N/A	
Net other income	-7	0	N/A	N/A	
PBT	1,375	802	-42%	-0%	
Reported NPAT	1,306	762	-42%	-0%	(1) Reported NPAT to decline 42% mainly due to the absence of one-off delayed FX payments. On March 30, QTP re-released its audited financial statements, revising 2020 reported NPAT to VND1.3tn (USD57mn) vs VND765bn (USD33mn) previously.
Adjusted NPAT*	851	762	-10%	-0%	(1) Adjusted NPAT to decline by 10% mainly due to the absence of compensation for contracted volume that EVN did not mobilize, which outweighs lower net interest expenses and higher sales volume.
Reported EPS (VND/share)	2,803	1,636	-42%	-0%	
DPS (VND/share)	1,000	1,000	0%	0%	
Dividend pay-out ratio	35%	61%			
Reported P/E	5.2x	8.9x			
Adjusted P/E	7.7x	8.6x			
EV/EBITDA	2.9x	4.0x			

Source: QTP, VCSC forecast; (*) excludes one-off income/expenses and FX gains/losses; price as at August 4, 2021.

We cut our 2021F NPAT forecast for HND by 6% mainly due to (1) a 2% upward revision in coal costs as our previous forecast for lower coal costs in 2021F did not materialize in H1 2021 and (2) a 2% cut to HND's 2021F competitive CGM prices as we factor in the potential impact of the fourth wave of COVID-19 on Vietnam's industry CGM prices in Q3 2021F while continuing to expect prices to rebound in Q4 2021F. Our 2022F-2025F NPAT remains largely unchanged. Please see our [HND Update Report](#), dated July 27, 2021, for more details.

2022 outlook: PPC's earnings to rebound from low base

Figure 4: PPC's 2022 outlook

VND bn	2021F	2022F	YoY	2022F New vs Old	VCSC's comments for: (1) 2022F forecast YoY changes (2) new vs old 2022F forecast
Sales volume (million kWh)	3,072	5,104	66%	0%	(1) Mainly driven by a higher level of contracted volume granted by EVN and full operation of the Pha Lai 2 power plant.
Pha Lai 1 (million kWh)	858	1,397	63%	0%	
Pha Lai 2 (million kWh)	2,214	3,707	67%	0%	
ASP* (VND/kWh)	1,407	1,491	6%	0%	(1) Mainly driven by a higher contribution from contracted volume (which is sold at higher prices vs CGM volume) and higher CGM prices for PPC.
Average material cost (VND/kWh)	1,128	1,153	2%	2%	(1) Average material cost to increase 2% YoY mainly on more expensive coal purchased from Vinacomin. (2) We raise our material cost forecast by 2% as our previous forecast for an improved heat rate in 2021F did not materialize.
Price spread* (VND/kWh)	279	338	21%	-3%	(1) Mainly driven by higher ASP.
Revenue	4,422	7,611	72%	0%	(1) Driven by a 66% recovery in sales volume and 6% ASP expansion.
Normalized revenue*	4,322	7,611	76%	0%	(1) Adjusted for VND100bn (USD4mn) in 2021F vs none in 2022F.
COGS	-4,373	-6,914	58%	1%	
Gross profit	49	696	13x	-8%	
Normalized gross profit*	-51	696	N/A	-8%	
G&A	-85	-88	3%	0%	
Operating profit (EBIT)	-36	609	N/A	-9%	
Net interest income	93	80	-14%	-9%	
Dividend received	453	256	-43%	0%	(1) Dividend income to decline 43% YoY as we forecast HND's cash dividend to fall in FY2021F after a record payout in FY2020.
Net other income	25	0	N/A	N/A	
PBT	535	944	77%	-7%	
Income tax exp	-16	-138	741%	-9%	
Reported NPAT	518	807	56%	-6%	(1) Mainly driven by a 66% and 21% recovery in sales volume and price spread, respectively. (2) We revise down our forecast mainly due to a 2% upward revision in coal cost.
Non-recurring item	100	0	N/A	N/A	
Adjusted NPAT*	418	807	93%	-6%	

Source: PPC, VCSC; (*) excludes one-off income/expenses and FX gains/losses.

QTP 2022F: Earnings edge down on higher coal costs

Figure 5: QTP's 2022 outlook

VND bn	2020	2021F	YoY	2021F New vs Old	VCSC's comments for: (1) 2022F forecast YoY changes (2) new vs old 2022F forecast
Sales volume (million kWh)	5,733	6,210	8%	0%	(1) Mainly driven by a higher level of contracted volume granted by EVN and higher CGM volume thanks to a forecast improvement in industry CGM prices.
	0	0			
ASP* (VND/kWh)	1,548	1,541	0%	0%	
Average material cost (VND/kWh)	1,093	1,128	3%	0%	(1) Average material cost to increase 3% YoY mainly due to more expensive coal purchased from Vinacomin.
Price spread* (VND/kWh)	455	414	-9%	0%	(1) Mainly driven by higher material costs.
Revenue	8,873	9,573	8%	0%	(1) Mainly driven by 8% sales volume growth.
- Cost of goods sold	-7,808	-8,657	11%	0%	
Gross profit	1,065	916	-14%	0%	
- SG&A	-110	-116	5%	0%	
Operating profit (EBIT)	955	800	-16%	0%	
Net interest income	-153	-63	-59%	0%	(1) Thanks to QTP's debt repayment.
Net FX gain/loss	0	0	N/A	N/A	
Net other income	0	0	N/A	N/A	
PBT	802	737	-8%	-0%	
Reported NPAT	762	700	-8%	-0%	(1) Mainly due to higher forecast material costs that offset higher sales volume.
Adjusted NPAT*	762	700	-8%	-0%	
Reported EPS (VND/share)	1,636	1,503	-8%	-0%	
DPS (VND/share)	1,000	1,000	0%	0%	
Dividend pay-out ratio	61%	67%			
Reported P/E	8.9x	9.6x			
Adjusted P/E	8.6x	9.3x			
EV/EBITDA	4.0x	4.3x			

Source: QTP, VCSC forecast; (*) excludes one-off income/expenses and FX gains/losses; price as at August 4, 2021.

Valuation

We continue to value PPC using a sum-of-the-parts (SOTP) approach that includes our DCF valuation of PPC's standalone power generation business (including Pha Lai 1 & 2) and an ownership-adjusted contribution of our discounted cash flow (DCF) valuations for HND and QTP. We believe this method is better to reflect PPC's value given our expectation that HND and QTP will finish paying down debt in the near term and contribute more significant dividends to PPC.

- We use the DCF method to value PPC's standalone cashflow, HND and QTP. The discounted cash flow method reflects the intrinsic value of the company and is the best method to value the stable cash flow of utilities companies.
- We apply a **15% discount to our blended valuation to set our target price**, thus reflecting our view that Vietnam's power sector currently offers somewhat limited transparency of information to investors. Vietnam is liberalizing its power sector, but there is scope for improving the available information about the pricing and operation mechanisms of the competitive generation/ wholesale/retail market, in our view.
- We apply an additional **5% discount to reflect the uncertainty regarding the potential delay to the full-operation resumption of the Pha Lai 2 power plant**.

We cut our target price by 18% mainly due to:

- A 18% cut to PPC's standalone power generation business' valuation due to lower sales volume in 2021F, our assumption for higher average coal cost in our forecast period, and a downward revision to our terminal growth from 1% to 0% to reflect our lower expectation from the potential valuation contribution from the Pha Lai 3 power plant.
- A 7% cut to our valuation for HND (see our HND Update Report, dated July 27, 2021).
- Our valuation for QTP remains unchanged as H1 2021 results tracked well with our forecast.
- An additional valuation discount of 5% for forecasting risks related to Pha Lai 2.

Figure 6: PPC's sum-of-the-parts valuation

VND bn	Equity value	Ownership	Contribution
PPC's standalone power generation business	5,320	100%	5,320
HND*	10,889	27%	2,907
QTP	11,484	16%	1,878
Fair value (VND bn)			10,105
Outstanding shares (million)			321
Fair value per share (VND/share)			31,600
Discount for sector's limited transparency			15.0%
Discount for Pha Lai 2's partial shutdown			5.0%
Target price (VND/share)			25,300
Upside %			+12.2%
Dividend yield %			6.7%
TSR %			+18.8%
2021F Reported PER at TP (x)			16.3x
2022F Reported PER at TP (x)			10.5x

Source: VCSC; (*) as published in our HND Update Report, dated July 27, 2021.

DCF valuation for PPC's standalone power generation business

We revise our terminal growth rate assumption from 1% to 0% in this report as we lower our expectation for the potential cash flow contribution from the Pha Lai 3 (600 MW) power plant that is expected to break ground in 2023-2024 and come online in 2028. This assumption implies a zero net present value contribution from Pha Lai 3 to PPC, which could be conservative given Vietnam's policy to guarantee a 10%-12% IRR for power generation plants in general. However, as there are potential risks to Vietnam's power investment policy due to the country's increasing consciousness on environmental issues, we are currently comfortable with the above assumption and will adjust accordingly once more information is available.

Figure 7: DCF valuation for PPC's standalone power generation business

Cost of Capital		Old	New	FCFF (Ten Year)		(VND bn)				
Beta		0.9	0.9	PV of Free Cash Flows		2,194				
Market Risk Premium %		9.9%	9.9%	PV of Terminal Val (0% g)		1,843				
Risk Free Rate %		2.6%	2.6%	PV of FCF and TV		4,037				
Cost of Equity %		11.5%	11.5%	+ Cash & ST investments		1,283				
Cost of Debt %		8.0%	8.0%	- Debt		0				
Debt %		0.0%	0.0%	- Minority Interest		0				
Equity %		100.0%	100.0%	Equity Value		5,320				
Corporate Tax Rate %		20.0%	20.0%	Shares (millions)		321				
WACC %		11.5%	11.5%	Value per share, VND		16,592				
(VND bn)	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F
EBIT	-36	609	756	782	771	802	825	849	878	933
+ Depreciation	46	46	46	46	46	36	36	36	226	200
- Tax	-16	-138	-159	-164	-163	-171	-177	-176	-168	-175
- Change in working cap	613	-446	-182	-58	-48	-55	-57	-59	-12	-61
- Capex	-50	-50	-50	-50	-50	-50	-50	-1,050	-1,050	-200
Free Cash Flow	557	21	411	556	556	563	577	-399	-126	697
Present Value of FCF	527	18	313	380	341	309	284	-176	-50	248
Cumulative PV of FCF	527	545	858	1,238	1,579	1,888	2,172	1,996	1,946	2,194

Source: VCSC forecast

DCF valuation for HND

Figure 8: DCF valuation for HND

Cost of Capital		Old	New	FCFF (Five Years)		VND bn				
Beta		0.9	0.9	PV of Free Cash Flows		5,651				
Market Risk Premium %		9.9%	9.9%	PV of 2nd stage value		7,600				
Risk Free Rate %		2.6%	2.6%	PV of FCF and TV		13,251				
Cost of Equity %		11.5%	11.5%	Cash & ST investments		62				
Cost of Debt %		6.0%	6.0%	Short & Long-term debt		-2,424				
Target Debt % / Capital %		10.0%	10.0%	Minority Interest		0				
Target Equity %		90.0%	90.0%	Equity Value		10,889				
Corporate Tax Rate %		20.0%	20.0%	Number of shares (million)		500				
WACC %		10.8%	10.8%	Value per share, VND		21,778				

Source: VCSC; (*) as published in our HND Update Report, dated July 27, 2021.

DCF valuation for QTP

Figure 9: DCF valuation for QTP

Cost of Capital		Old	New	FCFF (Five Years)		VND bn				
Beta		0.9	0.9	PV of Free Cash Flows		7,180				
Market Risk Premium %		9.9%	9.9%	PV of 2nd stage value		6,177				
Risk Free Rate %		2.6%	2.6%	PV of FCF and TV		13,356				
Cost of Equity %		11.5%	11.5%	Cash & ST investments		1,113				
Cost of Debt %		6.0%	6.0%	Short & Long-term debt		-2,985				
Target Debt % / Capital %		20.0%	20.0%	Minority Interest		0				
Target Equity %		80.0%	80.0%	Equity Value		11,484				
Corporate Tax Rate %		5.0%	5.0%	Number of shares (million)		450.0				
WACC %		10.3%	10.3%	Value per share, VND		25,520				

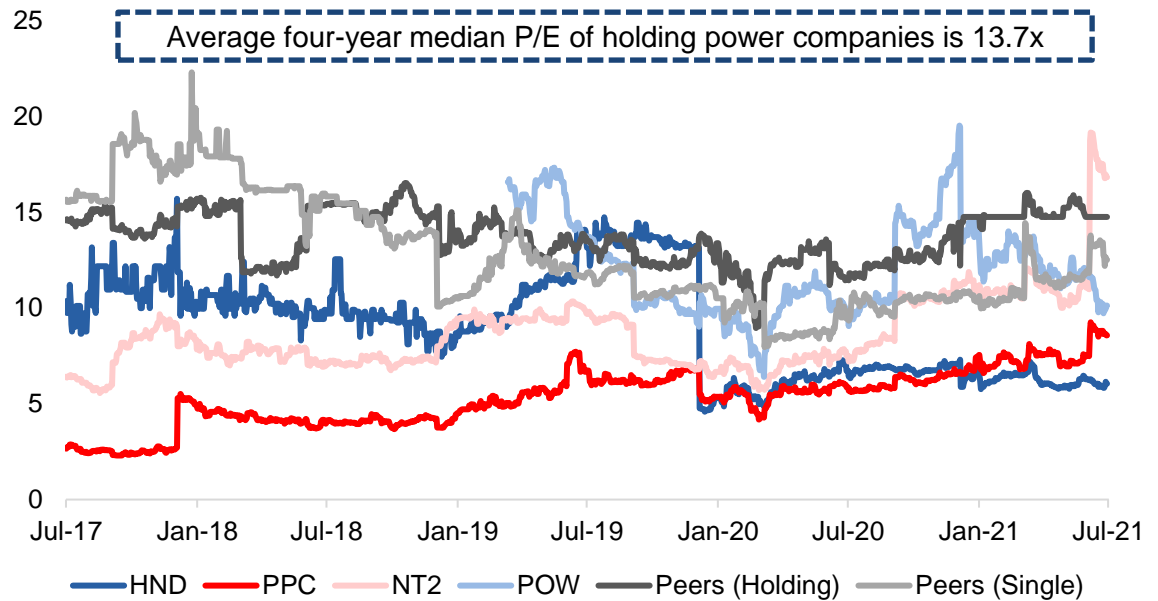
Source: VCSC



Comparable Peers

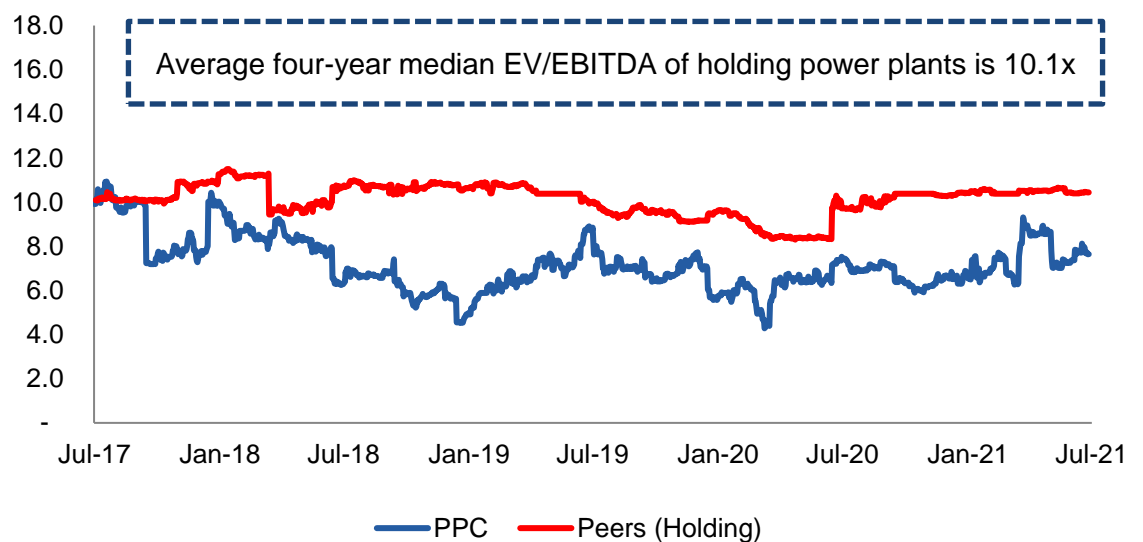
We have selected regional peers, including power holding companies that are consolidated or own stakes in several power plants — along with single power plants in Asia. All of these companies are power generators, but they differ from PPC in terms of power types, capacity and market mechanisms.

Figure 10: Historical median trailing P/E on reported earnings of PPC vs peers (x)



Source: Bloomberg, VCSC

Figure 11: Historical median trailing EV/EBITDA of PPC vs peers (x)



Source: Bloomberg, VCSC

Figure 12: Comparable Peers for PPC

Short Name	Country	Mkt Cap (USD mn)	TTM Net sales (USD mn)	YoY (%)	TTM NPAT (USD mn)	YoY (%)	NET D/E (%)	ROA (%)	ROE (%)	Div yield (%)	TTM P/E (x)	TTM PBR (x)	EV/ EBITDA (x)
POWER HOLDING COMPANIES													
Manila Electric	Philippines	6,440	5,514	-14	329	-11	-23	4.3	24.2	4.5	17.4	4.2	10.6
First Philip Hld	Philippines	799	2,162	-19	199	-16	38	2.7	9.3	2.7	4.0	0.4	4.8
Ratchaburi Elec	Thailand	2,052	1,022	-16	201	26	57	6.4	11.3	5.3	9.4	1.0	24.0
Banpu Power Pcl	Thailand	1,725	176	-5	118	40	9	7.3	8.9	3.6	14.7	1.3	40.0
Global Power Syn	Thailand	6,394	2,189	-10	240	68	75	3.1	7.8	2.1	25.9	1.9	14.6
Nava Bharat Vent	India	229	343	-6	57	7	33	4.4	9.8	N/A	3.8	0.3	3.2
Tata Power Co	India	5,270	4,374	11	152	11	159	1.2	5.4	1.3	31.5	1.8	10.9
Cikarang Listrin	Indonesia	710	465	-19	75	2	32	6.9	13.5	8.3	7.7	1.0	5.4
Ytl Power Intl	Malaysia	1,377	2,408	-12	16	-46	159	0.4	1.6	2.8	27.7	0.4	10.9
Malakoff Corp Bh	Malaysia	954	1,403	-17	68	-25	100	1.0	4.2	6.3	15.3	0.6	5.8
Mmc Corp Bhd	Malaysia	1,329	1,090	-2	89	70	90	1.7	4.6	1.9	12.5	0.6	7.5
K-Electric Ltd	Pakistan	707	1,812	-5	-19	-81	72	0.4	1.3	N/A	21.4	0.5	6.5
PetroVietnam Pow	Vietnam	1,236	1,269	-16	102	13	15	4.2	8.6	2.5	11.7	1.0	6.3
Median		1,283	1,336	-13	96	5	48	3.7	8.8	3.2	13.6	1.0	7.0
SINGLE POWER PLANTS													
Sahacogen Chonbu	Thailand	121	126	-8	3	57	124	2.4	6.0	1.5	23.6	1.4	8.3
Vivant Corp	Philippines	373	46	-33	29	-43	-4	5.8	8.4	2.0	14.4	1.2	19.3
Phinma Energy Co	Philippines	3,728	445	26	76	476	134	6.6	17.9	0.7	23.8	4.6	24.8
Guangzhou Heng	China	868	572	21	113	-33	55	4.1	10.0	3.1	11.2	1.1	11.0
Gepic Energy D	China	922	340	3	64	13	130	2.5	7.1	3.0	12.8	0.9	9.5
Yunnan Wenshan	China	541	286	-12	16	-55	3	3.8	5.0	1.0	31.8	1.6	12.4
Guizhou Qianyu	China	696	392	17	64	30	179	2.6	14.3	2.4	10.3	1.4	8.2
Guangzhou Heng	China	868	572	21	113	-33	55	4.1	10.0	3.1	11.2	1.1	11.0
Nhon Trach 2	Vietnam	258	259	-20	27	-26	17	7.8	12.8	9.7	11.1	1.4	5.2
Median		696	340	3	64	-26	55	4.1	10.0	2.4	12.8	1.4	11.0
PPC	Vietnam	310	246	-34	37	-22	-23	12.4	14.0	6.7	8.9	1.2	10.4

Source: Bloomberg, VCSC (data as at August 4, 2021)

Recommendation History

Figure 13: Recommendation history (VND/share)


Source: Bloomberg, VCSC; actual price is adjusted for cash dividend

Financial Statements for PPC*

P&L (VND bn)	2020	2021F	2022F	2023F	B/S (VND bn)	2020	2021F	2022F	2023F
Revenue	7,929	4,422	7,611	8,681	Cash & equivalents	273	511	387	291
COGS	-6,920	-4,373	-6,914	-7,825	ST investment	1,515	515	515	515
Gross Profit	1,009	49	696	856	Accounts receivable	1,516	1,066	1,668	1,903
Sales & Marketing exp	0	0	0	0	Inventories	697	404	639	723
General & Admin exp	-81	-85	-88	-100	Other current assets	258	258	258	258
Operating Profit	928	-36	609	756	Total Current assets	4,259	2,754	3,467	3,690
Financial income	287	546	336	295	Fix assets, gross	13,568	13,618	13,668	13,718
Financial expenses	-7	23	0	0	- Depreciation	-13,253	-13,299	-13,345	-13,392
- o/w interest expense	-3	0	0	0	Fix assets, net	315	319	323	327
Associates	0	0	0	0	LT investment	2,477	2,477	2,477	2,477
Net other income/(loss)	2	2	0	0	LT assets other	182	182	182	182
Profit before Tax	1,211	535	944	1,050	Total LT assets	2,974	2,978	2,982	2,986
Income Tax	-200	-16	-138	-159	Total Assets	7,234	5,732	6,449	6,676
NPAT before MI	1,011	518	807	892	Accounts payable	515	399	630	713
Minority Interest	0	0	0	0	Short-term debt	0	0	0	0
NPAT less MI, reported	1,011	518	807	892	Other ST liabilities	235	221	381	434
NPAT less MI, adjusted⁽¹⁾	820	418	807	892	Total current liabilities	750	620	1,011	1,147
EBITDA	966	10	655	802	Long term debt	0	0	0	0
EPS reported, VND	3,024	1,551	2,413	2,666	Other LT liabilities	0	0	0	0
EPS adjusted ⁽¹⁾ , VND	2,429	1,239	2,413	2,666	Total Liabilities	750	620	1,011	1,147
EPS fully diluted, VND	2,429	1,239	2,413	2,666	Preferred Equity	0	0	0	0
DPS, VND	5,894	1,500	2,500	2,500	Paid in capital	3,262	3,262	3,262	3,262
DPS/EPS (%)	195%	97%	104%	94%	Share premium	0	0	0	0
(1) Excluding FX gain/loss and one-off delayed FX payments					Retained earnings	3,222	1,850	2,176	2,266
RATIOS	2020	2021F	2022F	2023F	Other equity	0	0	0	0
Growth					Minority interest	0	0	0	0
Revenue growth	-3.1%	-44.2%	72.1%	14.1%	Total equity	6,484	5,113	5,439	5,529
Op profit (EBIT) growth	-22.9%	N.M.	N.M.	24.2%	Liabilities & equity	7,234	5,732	6,449	6,676
PBT growth	-20.8%	-55.8%	76.6%	11.2%	Y/E shares out, mn	320.6	320.6	320.6	320.6
EPS growth, adjusted	-18.6%	-49.0%	94.8%	10.5%	Treasury shares, mn	5.6	5.6	5.6	5.6
Profitability					CASH FLOW (VND bn)	2020	2021F	2022F	2023F
Gross Profit Margin	12.7%	1.1%	9.1%	9.9%	Beginning Cash Balance	241	273	511	387
Op Profit, (EBIT) Margin	11.7%	-0.8%	8.0%	8.7%	Net Income	1,011	518	807	892
EBITDA Margin	12.2%	0.2%	8.6%	9.2%	Dep, & amortization	38	46	46	46
NPAT-MI Margin, adj,	12.8%	11.7%	10.6%	10.3%	Change in Working Cap	29	613	-446	-182
ROE	16.2%	8.9%	15.3%	16.3%	Other adjustments	-174	0	0	0
ROA	14.0%	8.0%	13.2%	13.6%	Cash from Operations	904	1,177	407	755
Efficiency					Capital Expenditures, net	-50	-50	-50	-50
Days Inventory On Hand	36	46	28	32	Investments, net	-85	1,000	0	0
Days Accts, Receivable	85	85	85	85	Cash from Investments	-135	950	-50	-50
Days Accts, Payable	33	38	27	31	Dividends Paid	-609	-1,890	-481	-802
Cash Conversion Days	88	93	85	85	Δ in Share Capital	0	0	0	0
Liquidity					Δ in ST debt	-127	0	0	0
Current Ratio x	5.7	4.4	3.4	3.2	Δ in LT debt	0	0	0	0
Quick Ratio x	4.8	3.8	2.8	2.6	Other financing C/F	0	0	0	0
Cash Ratio x	0.4	0.8	0.4	0.3	Cash from Financing	-736	-1,890	-481	-802
Debt / Assets	0.0%	0.0%	0.0%	0.0%	Net Change in Cash	33	238	-124	-96
Debt / Capital	0.0%	0.0%	0.0%	0.0%	Ending Cash Balance	273	511	387	291
Net Debt / Equity	-27.6%	-20.1%	-16.6%	-14.6%					
Interest Coverage x	N.M.	N.M.	N.M.	N.M.					

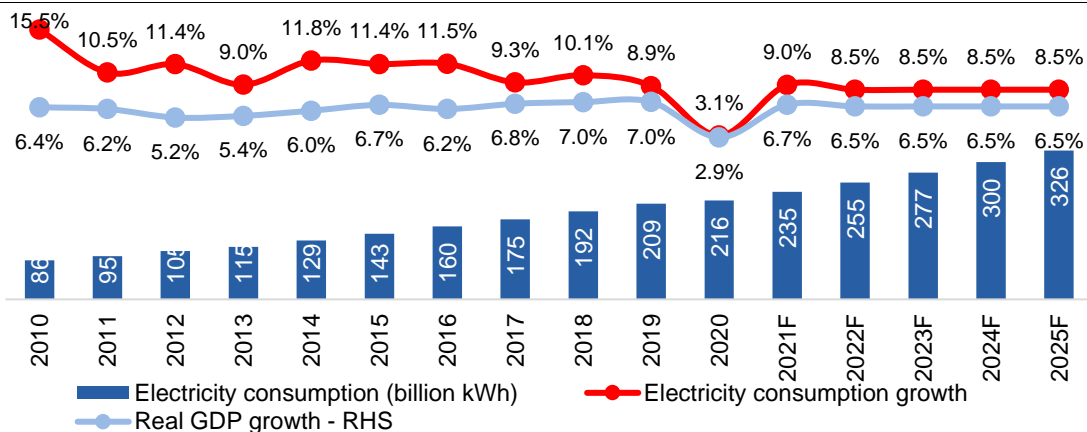
Source: PPC, VCSC. * Parent company; consolidated financial statement is not available; PPC uses the cost method for HND, not the equity method.

Appendix: Updated sector assumptions

Vietnam's power consumption to grow ~8%-9% p.a. between 2021F-2025F

COVID-19 remains a source of uncertainty in macro forecasting; however, our base-case scenario continues to be that the global economy — along with Vietnam — will continue to recover progressively from the disruptions of COVID-19 through 2021. Using our assumption for Vietnam's energy elasticity at 1.3, we estimate that Vietnam is likely to have power consumption growth of 8%-9% p.a. between 2021F and 2025F.

Figure 14: Vietnam's historical and forecast electricity consumption growth vs GDP growth



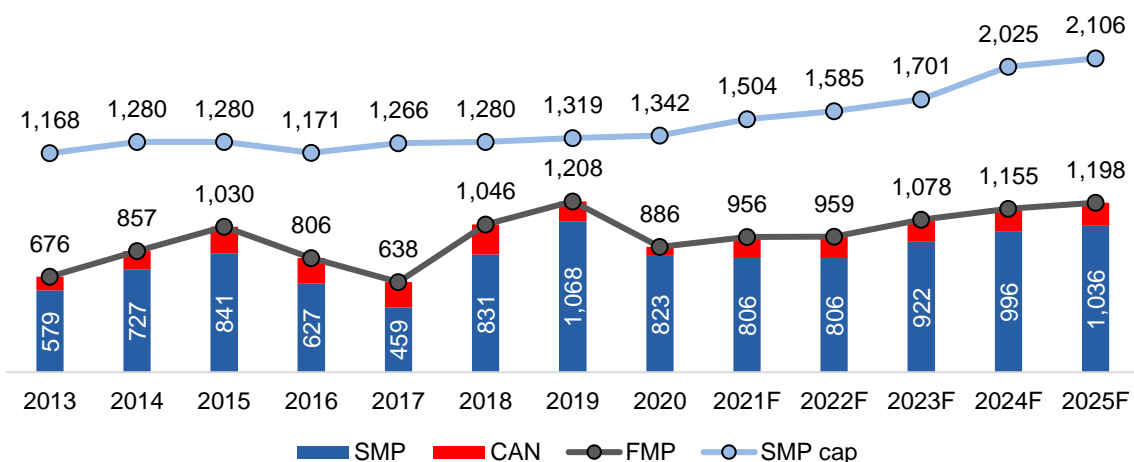
Source: EVN, VCSC forecast

Lower contracted volume and low CGM prices may create an earnings headwind for thermal power plants in 2021F

Despite expected strong electricity consumption in 2021F and 2022F, we assume CGM prices will be less than VND1,000/kWh over the next two years due to improved rainfall and a higher contribution from solar/wind power sources. For the long term, we assume CGM prices will bounce back and increase at an average of 5%-10% p.a. from 2022-2025F due to a demand recovery and higher gas/coal prices.

On the other hand, it is positive that the Ministry of Industry and Trade (MoIT) significantly raised capacity add-on (CAN) price from VND64/kWh in 2020 to VND150/kWh along with the system marginal price (SMP) cap from VND1,342/kWh in 2020 to VND1,504/kWh in 2021. These increases are an opportunity for power plants to receive sizeable profits for non-contracted volume.

Figure 15: CGM (also known as FMP) price outlook (VND/kWh)



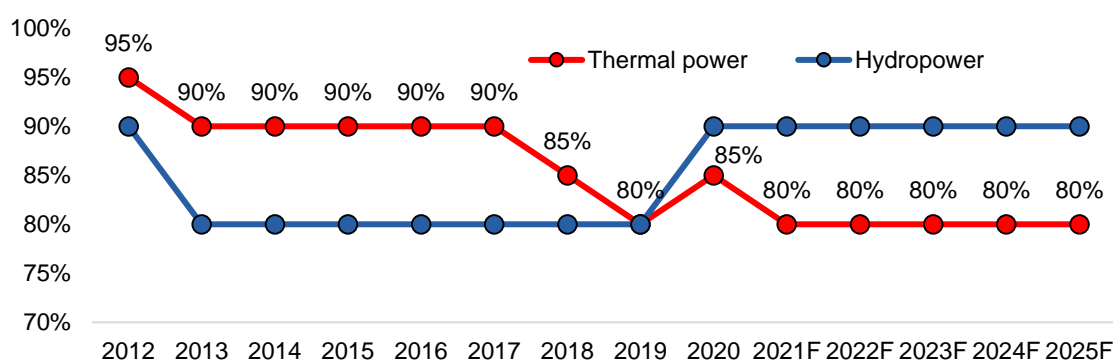
Source: EVN, MoIT, industry players, VCSC's estimation

Note: CGM/FMP = SMP + CAN. SMP: the highest auction price needed to be employed in order to balance with the system supply/demand; CAN: the extra price paid for the best new entrant power plant to break even.

We expect CGM prices to be weak in 2021-2022 before increasing over the following years. Despite expected strong electricity consumption in 2021F and 2022F, we assume CGM prices will be less than VND1,000/kWh over the next two years due to improved rainfall and a higher contribution from solar/wind power sources. For the long term, we assume CGM prices will bounce back and increase at an average of 5%-10% p.a. from 2022-2025F due to a demand recovery and higher gas/coal prices.

Contracted volume to account for 80% and 90% of planned volume for thermal power plants and hydropower plants in 2021, respectively. Compared to 2020, EVN has effectively lowered its contracted volume percentage for thermal power plants from 85% to 80% while maintaining the ratio for hydropower plants. This adjustment implies an earnings headwind for thermal power plants as less of their sales volume is protected (they sell at PPA prices that guarantee profits) against an overall improvement of hydropower plant volume that will keep CGM prices lower vs a thermal power plant's variable cost (which is estimated to range between VND900/kWh and VND1,300/kWh, depending on the plant).

Figure 16: Contracted volume ratio (%), Qc), historical and forecast



Source: MoIT, industry players, VCSC

We maintain our benchmark coal price forecast

Due to differences in boiler technology, each thermal power plant in Vietnam can opt to use different grades of coal with different energy potential (calorific value or kcal/kg) that are sold at various price points. For the sake of simplicity, as benchmarks for our industry price forecast, we choose 5a domestic coal with a calorific value of 5,500 kcal/kg and its mixed-coal equivalent (a mixture of locally produced coal and imported coal). Our coal cost forecast for each individual stock under our coverage will be derived from this benchmark, adjusted for the particular type of coal it uses, each company's different agreements with Vinacomin and other suppliers, as well as inventory days.

Please see our full comments regarding the international and domestic coal prices in our [Energy Sector Update Report](#), dated July 27, 2021.

Figure 17: Forecast of average prices of 5a domestic coal and its mixed-coal equivalent

VND mn/tonne	2020	2021F	2022F	2023F	2024F	2025F
Domestic coal, 5a (5,500 kcal/kg)	1.845	1.882	1.976	2.075	2.179	2.287
YoY growth	2.1%	2.0%	5.0%	5.0%	5.0%	5.0%
Mixed coal, 5a equivalent	1.848	1.848	1.908	1.971	2.051	2.084
YoY growth	-3.1%	0.0%	3.3%	3.3%	4.0%	1.6%
Mixed coal, 5a equivalent (USD/tonne)	80.3	80.3	82.9	85.7	89.2	90.0

Source: MoIT, industry players, VCSC



VCSC Rating System

Stock ratings are set based on projected total shareholder return (TSR), defined as $(\text{target price} - \text{current price}) / \text{current price} + \text{dividend yield}$, and are not related to market performance.

Equity rating key	Definition
BUY	If the projected TSR is 20% or higher
OUTPERFORM	If the projected TSR is between 10% and 20%
MARKET PERFORM	If the projected TSR is between -10% and 10%
UNDERPERFORM	If the projected TSR is between -10% and -20%
SELL	If the projected TSR is -20% or lower
NOT RATED	The company is or may be covered by the Research Department but no rating or target price is assigned either voluntarily or to comply with applicable regulation and/or firm policies in certain circumstances, including when VCSC is acting in an advisory capacity in a merger or strategic transaction involving the company.
RATING SUSPENDED, COVERAGE TERMINATED	A rating may be suspended, or coverage terminated, if fundamental information is deemed insufficient to determine a target price or investment rating or due to a reallocation of research resources. Any previous investment rating and target price are no longer in effect.

Unless otherwise specified, these performance parameters are set with a 12-month horizon. Movement in share prices may cause a temporary mismatch between the latest published rating and projected TSR for a stock based on its market price and the latest published target price.

Target prices are generally based on the analyst's assessment of the stock's fair value over a 12-month horizon. However, the target price may differ from the analyst's fair value if the analyst believes that the market will not price the stock in line with assessed fair value over the specified time horizon.

Risks: Past performance is not necessarily indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative.

Disclaimer

Analyst Certification of Independence

We, Nghia Le and Duong Dinh, hereby certify that the views expressed in this report accurately reflect our personal views about the subject securities or issuers. We also certify that no part of our compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. The equity research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues, which include revenues from, among other business units, Institutional Equities and Investment Banking.

VCSC and its officers, directors and employees may have positions in any securities mentioned in this document (or in any related investment) and may from time to time add to or dispose of any such securities (or investment). VCSC may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment.

Copyright 2013 Viet Capital Securities Company "VCSC". All rights reserved. This report has been prepared on the basis of information believed to be reliable at the time of publication. VCSC makes no representation or warranty regarding the completeness and accuracy of such information. Opinions, estimates and projection expressed in this report represent the current views of the author at the date of publication only. They do not necessarily reflect the opinions of VCSC and are subject to change without notice. This report is provided, for information purposes only, to institutional investors and retail clients of VCSC in Vietnam and overseas in accordance to relevant laws and regulations explicit to the country where this report is distributed, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction. Investors must make their investment decisions based upon independent advice subject to their particular financial situation and investment objectives. This report may not be copied, reproduced, published or redistributed by any person for any purpose without the written permission of an authorized representative of VCSC. Please cite sources when quoting.

U.K. and European Economic Area (EEA): Unless specified to the contrary, issued and approved for distribution in the U.K. and the EEA by VCSC issued by VCSC has been prepared in accordance with VCSC's policies for managing conflicts of interest arising as a result of publication and distribution of investment research. Many European regulators require a firm to establish, implement and maintain such a policy. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. **Australia:** This material is issued and distributed by VCSC in Australia to "wholesale clients" only. VCSC does not issue or distribute this material to "retail clients". The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of VCSC. For the purposes of this paragraph the terms "wholesale client" and "retail client" have the meanings given to them in section 761G of the Corporations Act 2001. **Hong Kong:** The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.5(a) of the Hong Kong Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months prior.) **Japan:** There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, VCSC will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between VCSC and the customer in advance. **Korea:** This report may have been edited or contributed to from time to time by affiliates of VCSC. **Singapore:** VCSC and/or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is 1% or greater, the specific holding is disclosed in the Important Disclosures section above. **India:** For private circulation only, not for sale. **Pakistan:** For private circulation only, not for sale. **New Zealand:** This material is issued and distributed by VCSC in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. VCSC does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of VCSC. **Canada:** The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities must be conducted through a dealer registered in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offence. **Dubai:** This report has been issued to persons regarded as professional clients as defined under the DFSA rules. **United States:** This research report prepared by VCSC is distributed in the United States to Major US Institutional Investors (as defined in Rule 15a-6 under the Securities Exchange Act of 1934, as amended) only by Decker&Co, LLC, a broker-dealer registered in the US (registered under Section 15 of Securities Exchange Act of 1934, as amended). All responsibility for the distribution of this report by Decker&Co, LLC in the US shall be borne by Decker&Co, LLC. All resulting transactions by a US person or entity should be effected through a registered broker-dealer in the US. This report is not directed at you if VCSC Broker or Decker&Co, LLC is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that Decker&Co, LLC and VCSC is permitted to provide research material concerning investment to you under relevant legislation and regulations.

Contacts

Corporate

www.vcsc.com.vn

Head Office

Bitexco Financial Tower, 2 Hai Trieu Street
District 1, HCMC
+84 28 3914 3588

Transaction Office

10 Nguyen Hue Street
District 1, HCMC
+84 28 3914 3588

Research

Research Team: +84 28 3914 3588
research@vcsc.com.vn

Banks, Securities and Insurance

Long Ngo, Associate Director, ext 123

- Truc Ngo, Analyst, ext 116
- Tu Hoang, Analyst, ext 139
- Ngoc Huynh, Analyst, ext 138

Consumer and Pharma

Phap Dang, Associate Director, ext 143

- Ha Dao, Senior Analyst, ext 194
- Son Tran, Senior Analyst, ext 185
- Vinh Bui, Analyst, ext 191

Real Estate, Construction and Materials

Hong Luu, Senior Manager, ext 120

- Vy Nguyen, Manager, ext 147
- Duc Pham, Analyst, ext 174

Retail Client Research

Duc Vu, Senior Manager, ext 363

- Trung Nguyen, Senior Analyst, ext 129
- Anh Tong, Analyst, ext 363
- Ha Bui, Analyst, ext 364

Institutional Sales and Brokerage

& Foreign Individuals

Dung Nguyen

+84 28 3914 3588, ext 136
dung.nguyen@vcsc.com.vn

Hanoi Branch

109 Tran Hung Dao
Hoan Kiem District, Hanoi
+84 24 6262 6999

Transaction Office

236-238 Nguyen Cong Tru Street
District 1, HCMC
+84 28 3914 3588

Alastair Macdonald, Head of Research, ext 105

alastair.macdonald@vcsc.com.vn

Macro

Luong Hoang, Manager, ext 364

- Nguyen Truong, Senior Analyst, ext 132

Oil & Gas and Power

Duong Dinh, Senior Manager, ext 140

- Tram Ngo, Manager, ext 135
- Nghia Le, Analyst, ext 181
- Duc Le, Analyst, ext 196

Industrials and Transportation

Nam Hoang, Manager, ext 124

- Dang Thai, Senior Analyst, ext 149
- Huy Phan, Analyst, ext 173

Retail & Corporate Brokerage

Ho Chi Minh & Hanoi

Quynh Chau

+84 28 3914 3588, ext 222
quynh.chau@vcsc.com.vn